

TRADE SECRET

Study Title

**H-28548: COMBINED CHRONIC TOXICITY/ONCOGENICITY
STUDY 2-YEAR ORAL GAVAGE STUDY IN RATS**

Laboratory Project ID: DuPont-18405-1238

Volume 9 of 13

NUMBER OF PAGES IN VOLUME: 351

- TEST GUIDELINES:**
- U.S. EPA Health Effects Test Guidelines OPPTS 870.4300 Combined Chronic Toxicity/Carcinogenicity (1998)
 - OECD Guidelines for the Testing of Chemicals Section 4 (No. 453) Health Effects (2009)
 - JMAFF Japan Agricultural Chemicals Regulation Law 12 Nousan No. 8147 (2000)
 - EEC Methods for the Determination of Toxicity Method B.33 Combined Chronic/Carcinogenicity test, Directive 88/302/EC (1988)

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STUDY COMPLETED ON: March 28, 2013

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MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1222	D	Microscopic salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, severe - within normal limits - within normal limits
D - Died on Study			

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Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1222	D	Microscopic trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - within normal limits - pituitary tumor
1223	S	Macroscopic lymph node, inguinal skin skin, subcutis	- within normal limits draining node for mass a, right. - nodule, tan, dorsal thoracic region, present corresponds to antemortem observation (nodule) approximately 0.4 cm in diameter. - swollen/thickened, inguinal, right, severe - mass, tan, mass a, right inguinal area, present corresponds to antemortem observation (mass 1) approximately 10.0 x 9.0 x 2.0 cm.
1223	S	Microscopic liver	- focus of cellular alteration, eosinophilic, minimal - hematopoiesis, extramedullary, minimal - hyperplasia, bile duct, minimal

S - Scheduled necropsy
D - Died on Study

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Individual Animal Listing - MALE
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Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1223	S	Microscopic lymph node, inguinal pancreas skin skin, subcutis testes tongue	- within normal limits - hyperplasia, acinar cell, focal, minimal - keratoacanthoma, benign, multiple, primary, mortality-independent corresponds to macroscopic observation (skin - nodule; skin - swollen/thickened) - lipoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a) - within normal limits - within normal limits
1224	E	Macroscopic lymph node, mandibular skin, subcutis	- discoloration, red, left, mild draining node for mass a. - mass, red, mass a, cranial, present corresponds to antemortem observation (mass 1) approximately 3.0 cm in diameter, dorsal.
1224	E	Microscopic adrenal glands	- hyperplasia, focal medullary, unilateral, mild

S - Scheduled necropsy
E - Euthanized *in extremis*

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Individual Animal Listing - MALE

Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1224	E	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1224	E	Microscopic large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular	 - within normal limits - within normal limits - within normal limits - infiltration, mononuclear cell, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - fibrosis, minimal - within normal limits - within normal limits - adenoma, pars distalis, benign, primary, incidental, not cause of death - within normal limits - within normal limits

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1224	E	Microscopic salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin skin, subcutis small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - fibrosarcoma, malignant, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a) - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, severe - within normal limits

E - Euthanized *in extremis*

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Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1224	E	Microscopic tongue trachea ureters urinary bladder non-correlated macro observation Cause of Death	- within normal limits - within normal limits - within normal limits - within normal limits - lymph node, mandibular - discoloration, red - fibrosarcoma/fibroma
1225	S	Macroscopic lung with bronchi lymph node, axillary skin, subcutis	- focus/foci, tan, left lobe, mild - within normal limits draining node for mass a, right. - mass, tan, mass a, right lateral thorax, present corresponds to antemortem observation (mass 1) approximately 5.0 cm in diameter.
1225	S	Microscopic liver	- degeneration, cystic, focal, minimal - hematopoiesis, extramedullary, minimal

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Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1225	S	Microscopic lung lymph node, axillary pancreas skin, subcutis testes tongue	- inflammation, subacute/chronic, mild corresponds to macroscopic observation (lung with bronchi - focus/foci, tan) - within normal limits - within normal limits - fibroma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a) - within normal limits - within normal limits
1226	E	Macroscopic pituitary gland seminal vesicles testes	- enlarged, red, severe - small, mild - enlarged, right, mild
1226	E	Microscopic adrenal glands aorta	- hyperplasia, focal medullary, bilateral, minimal - within normal limits

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Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1226	E	Microscopic bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon	 - within normal limits - within normal limits - within normal limits - within normal limits - compression, ventral (pituitary tumor), moderate - depletion, secretory, bilateral, moderate - oligospermia/germ cell debris, unilateral, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, moderate - within normal limits - within normal limits - within normal limits

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1226	E	Microscopic large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric mammary gland nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland	- within normal limits - within normal limits - infiltration, mononuclear cell, minimal - within normal limits - within normal limits - within normal limits - dilatation, gland/lumen, mild - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits one of pair present - within normal limits - adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged) - within normal limits

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1226	E	Microscopic salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus	- within normal limits - within normal limits - within normal limits - depletion, secretory, bilateral, moderate corresponds to macroscopic observation (seminal vesicles - small) - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hematopoiesis, extramedullary, increased, minimal - within normal limits - within normal limits - adenoma, interstitial cell, benign, unilateral, primary, incidental, not cause of death corresponds to macroscopic observation (testes - enlarged) - depletion, lymphoid, generalized, moderate

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u>			
1226	E	Microscopic thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - pituitary tumor
1227	S	Macroscopic pituitary gland skin	- enlarged, red, mild - abrasion/scab, dorsal lumbar region, mild corresponds to antemortem observation (nodule)
1227	S	Microscopic liver pancreas	- degeneration, cystic, focal, minimal - hematopoiesis, extramedullary, minimal - adenoma, islet cell, benign, primary, incidental, not cause of death - atrophy, acinar, minimal
S - Scheduled necropsy E - Euthanized <i>in extremis</i>			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1227	S	Microscopic pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		skin	- adenoma, sebaceous cell, benign, primary, mortality-independent corresponds to macroscopic observation (skin - abrasion/scab)
		testes	- within normal limits
		tongue	- within normal limits
1228	D	Macroscopic eyes	- absent/cannibalized, right, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
		harderian glands	- absent/cannibalized, right, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
		lacrimal glands, exorbital	- absent/cannibalized, right, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
		lymph node, hepatic	- enlarged, moderate
S - Scheduled necropsy D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1228	D	Macroscopic lymph node, mediastinal lymph node, mesenteric pancreas	- enlarged, moderate - within normal limits draining node for mass a. - mass, tan, mass a, present approximately 1.0 x 0.5 x 0.5 cm. - enlarged, severe
1228	D	Microscopic spleen adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands	- within normal limits - within normal limits - leukemia, large granular lymphocyte, malignant, multicentric, fatal, positive cause of death - leukemia, large granular lymphocyte, malignant, multicentric, fatal, positive cause of death - within normal limits - within normal limits - leukemia, large granular lymphocyte, malignant, multicentric, fatal, positive cause of death - within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1228	D	Microscopic epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys	- within normal limits - within normal limits - within normal limits one of pair present one cannibalized. - within normal limits - within normal limits autolysis too severe for diagnosis one cannibalized. - within normal limits - within normal limits one of pair present one cannibalized. - cardiomyopathy, minimal - within normal limits - leukemia, large granular lymphocyte, malignant, bilateral, multicentric, fatal, positive cause of death - nephropathy, chronic progressive, unilateral, minimal
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1228	D	Microscopic lacrimal glands, exorbital	- within normal limits one of pair present one cannibalized.
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- leukemia, large granular lymphocyte, malignant, multicentric, fatal, positive cause of death
		lung	- leukemia, large granular lymphocyte, malignant, multicentric, fatal, positive cause of death
		lymph node, hepatic	- leukemia, large granular lymphocyte, malignant, multicentric, fatal, positive cause of death corresponds to macroscopic observation (lymph node, hepatic - enlarged)
		lymph node, mandibular	- leukemia, large granular lymphocyte, malignant, multicentric, fatal, positive cause of death
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1228	D	Microscopic lymph node, mediastinal	- leukemia, large granular lymphocyte, malignant, multicentric, fatal, positive cause of death corresponds to macroscopic observation (lymph node, mediastinal - enlarged)
		lymph node, mesenteric	- leukemia, large granular lymphocyte, malignant, multicentric, fatal, positive cause of death corresponds to macroscopic observation (pancreas - mass a)
		multicentric neoplasm	- leukemia, large granular lymphocyte, malignant, multicentric, fatal, positive cause of death
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- leukemia, large granular lymphocyte, malignant, multicentric, fatal, positive cause of death
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1228	D	Microscopic pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - leukemia, large granular lymphocyte, malignant, multicentric, fatal, positive cause of death corresponds to macroscopic observation (spleen - enlarged) - within normal limits - within normal limits
D - Died on Study			

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Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1228	D	Microscopic testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - lymphoid tumor
1229	E	Macroscopic pituitary gland skin	- enlarged, moderate - abrasion/scab, dorsal thoracic region, mild corresponds to antemortem observation (nodule)
1229	E	testes Microscopic adrenal glands	- small, bilateral, mild - pheochromocytoma, benign, bilateral, primary, incidental, not cause of death

E - Euthanized *in extremis*
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1229	E	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - compression, ventral (pituitary tumor), mild - within normal limits - oligospermia/germ cell debris, bilateral, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - mineralization, pelvic, unilateral, minimal - nephropathy, chronic progressive, bilateral, minimal - pyelitis, bilateral, minimal
E - Euthanized <i>in extremis</i>			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1229	E	Microscopic lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - degeneration, cystic, focal, minimal - hematopoiesis, extramedullary, minimal - hyperplasia, bile duct, minimal - necrosis, focal, mild - histiocytosis, alveolar, minimal - within normal limits - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - adenoma, islet cell, benign, primary, incidental, not cause of death

E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1229	E	Microscopic parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- keratoacanthoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin - abrasion/scab)
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits

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Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1229	E	Microscopic spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - degeneration/atrophy, seminiferous tubules, bilateral, severe corresponds to macroscopic observation (testes - small) - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - pituitary tumor
1230	E	Macroscopic all tissues	- within normal limits
1230	E	Microscopic adrenal glands	- within normal limits

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1230	E	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

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Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1230	E	Microscopic large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular	 - within normal limits - within normal limits - within normal limits - necrosis, focal, minimal - bacterial colonies, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits one of pair present - within normal limits - within normal limits - within normal limits - within normal limits
E - Euthanized <i>in extremis</i>			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1230	E	Microscopic salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u>			
1230	E	Microscopic ureters urinary bladder Cause of Death	- within normal limits - within normal limits - undetermined
1231	D	Macroscopic all tissues	- within normal limits
1231	D	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
E - Euthanized <i>in extremis</i> D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1231	D	Microscopic eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - hydronephrosis, unilateral, minimal - nephropathy, chronic progressive, bilateral, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, bile duct, minimal - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in RatsIndividual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1231	D	Microscopic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - adenoma, pars distalis, benign, primary, incidental, not cause of death - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1231	D	Microscopic spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - undetermined
1232	D	Macroscopic pituitary gland	- enlarged, red, moderate
1232	D	Microscopic adrenal glands	- within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1232	D	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - compression, ventral (pituitary tumor), moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - not examined autolysis too severe for diagnosis - within normal limits - within normal limits - cardiomyopathy, mild - within normal limits - hydronephrosis, unilateral, mild - nephropathy, chronic progressive, bilateral, moderate
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1232	D	Microscopic lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - infiltration, mononuclear cell, minimal - within normal limits - within normal limits - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - exudate, nasal passage, mild - fungus/yeast, mild - within normal limits - within normal limits - within normal limits - not examined - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1232	D	Microscopic pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u>			
1232	D	Microscopic stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - pituitary tumor
1233	E	Macroscopic pituitary gland	- enlarged, severe
1233	E	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum	- within normal limits - within normal limits - within normal limits - within normal limits
E - Euthanized <i>in extremis</i> D - Died on Study			

Dupont-18405-1238

Individual Animal Listing - MALE

Terminal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1233	E	Microscopic liver	- infiltration, mononuclear cell, minimal - vacuolation, periportal, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1233	E	Microscopic salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue	 - within normal limits - within normal limits - depletion, secretory, bilateral, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - erosion/ulcer, minimal - inflammation, minimal - inflammation, minimal - degeneration/atrophy, seminiferous tubules, bilateral, severe - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in RatsIndividual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u>			
1233	E	Microscopic trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - within normal limits - pituitary tumor
1234	D	Macroscopic all tissues	- within normal limits
1234	D	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1234	D	Microscopic esophagus eyes eyes, optic nerves eyes, retina gall harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver	- within normal limits - within normal limits - within normal limits - not examined autolysis too severe for diagnosis - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - degeneration, cystic, focal, minimal - vacuolation, periportal, minimal
D - Died on Study			

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Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1234	D	Microscopic lung	- bacterial colonies, minimal - hemorrhage, minimal red blood cell lysis secondary to dosing injury.
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- fibrosis, minimal
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
D - Died on Study			

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Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1234	D	Microscopic skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hematopoiesis, extramedullary, increased, minimal - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - dosing injury
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1235	D	Macroscopic eyes	- absent/cannibalized, left, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
		eyes, optic nerves	- absent/cannibalized, left, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
		eyes, retina	- absent/cannibalized, left, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
		harderian glands	- absent/cannibalized, left, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
		lacrimal glands, exorbital	- absent/cannibalized, left, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
		tongue	- absent/cannibalized, no grade corresponds to antemortem observation (cannibalized/partially cannibalized) tip of tongue missing.
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in RatsIndividual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1235	D	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits one of pair present - within normal limits one of pair present - not examined autolysis too severe for diagnosis - within normal limits - within normal limits one of pair present
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1235	D	Microscopic heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d	- cardiomyopathy, minimal - within normal limits - mineralization, tubular, unilateral, minimal - nephropathy, chronic progressive, bilateral, mild - within normal limits one of pair present - within normal limits - within normal limits - within normal limits - within normal limits - vacuolation, periportal, minimal - histiocytosis, alveolar, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1235	D	Microscopic pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen	- within normal limits - within normal limits one of pair present - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hematopoiesis, extramedullary, increased, minimal
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1235	D	Microscopic stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - undetermined
1236	E	Macroscopic heart pituitary gland stomach, glandular testes	- discoloration, white, left ventricle, mild - enlarged, red, severe - focus/foci, red, mucosa, mild - small, bilateral, mild

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1236	E	Microscopic adrenal glands	- hyperplasia, focal cortical, unilateral, minimal - hyperplasia, focal medullary, unilateral, minimal - vacuolation, focal, bilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		coagulating glands	- depletion, secretory, bilateral, severe
		epididymides	- oligospermia/germ cell debris, bilateral, severe
		esophagus	- within normal limits
		eyes	- inflammation, acute, unilateral, moderate - metaplasia, squamous, bilateral, mild
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1236	E	Microscopic heart	- cardiomyopathy, moderate corresponds to macroscopic observation (heart - discoloration, white)
		joint, tibiofemoral	- within normal limits
		kidneys	- nephropathy, chronic progressive, bilateral, severe
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal - infiltration, mononuclear cell, minimal - vacuolation, periportal, mild
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in RatsIndividual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1236	E	Microscopic nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum	 - within normal limits - within normal limits - within normal limits - within normal limits one of pair present - within normal limits - adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged) - within normal limits - within normal limits - within normal limits - within normal limits - depletion, secretory, bilateral, severe - degeneration/necrosis, myofiber, mild - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1236	E	Microscopic small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - erosion/ulcer, mild corresponds to macroscopic observation (stomach, glandular - focus/foci, red) - within normal limits - degeneration/atrophy, seminiferous tubules, bilateral, severe corresponds to macroscopic observation (testes - small) - polyarteritis, unilateral, minimal - depletion, lymphoid, generalized, moderate - adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u>			
1236	E	Microscopic Cause of Death	- pituitary tumor
1237	E	Macroscopic kidneys lung with bronchi lymph node, generalized lymph node, iliac lymph node, mandibular spleen thymus	- irregular surface, green, bilateral, moderate - focus/foci, red, multiple lobes, minimal - enlarged, green, moderate - enlarged, green, bilateral, moderate - enlarged, green, bilateral, moderate - enlarged, moderate - enlarged, green, moderate
1237	E	Microscopic adrenal glands aorta bone marrow, femur	- leukemia, granulocytic, malignant, bilateral, multicentric, fatal, positive cause of death - within normal limits - leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
E - Euthanized <i>in extremis</i>			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1237	E	Microscopic bone marrow, sternum	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		cavity, abdominal	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death slide 1.
		cavity, thoracic	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death slide 14.
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- leukemia, granulocytic, malignant, bilateral, multicentric, fatal, positive cause of death
		eyes, optic nerves	- leukemia, granulocytic, malignant, bilateral, multicentric, fatal, positive cause of death
		eyes, retina	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1237	E	Microscopic galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death - leukemia, granulocytic, malignant, bilateral, multicentric, fatal, positive cause of death - leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death - within normal limits - hyaline, droplets, increased, bilateral, moderate - hydronephrosis, bilateral, mild - leukemia, granulocytic, malignant, bilateral, multicentric, fatal, positive cause of death corresponds to macroscopic observation (kidneys - irregular surface) - leukemia, granulocytic, malignant, bilateral, multicentric, fatal, positive cause of death - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1237	E	Microscopic larynx	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
		liver	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
		lung	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death corresponds to macroscopic observation (lung with bronchi - focus/foci, red)
		lymph node, iliac	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death corresponds to macroscopic observation (lymph node, iliac - enlarged)
		lymph node, mandibular	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death corresponds to macroscopic observation (lymph node, mandibular - enlarged)
		lymph node, mediastinal	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death slide 14.

E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1237	E	Microscopic lymph node, mesenteric multicentric neoplasm nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death - leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death - within normal limits one of pair present - within normal limits - within normal limits - leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1237	E	Microscopic salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle skeletal muscle, biceps femoris skin skin, subcutis small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death - within normal limits - within normal limits - leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death slide 21. - within normal limits - within normal limits - leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1237	E	Microscopic spleen	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death corresponds to macroscopic observation (spleen - enlarged)
		stomach, glandular	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
		stomach, nonglandular	- within normal limits
		testes	- within normal limits
		thymus	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death corresponds to macroscopic observation (thymus - enlarged)
		thyroid gland	- cyst, follicular, unilateral, mild - leukemia, granulocytic, malignant, bilateral, multicentric, fatal, positive cause of death
		tongue	- within normal limits
		trachea	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
		ureters	- within normal limits
		urinary bladder	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death

E - Euthanized *in extremis*

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Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u>			
1237	E	Microscopic Cause of Death	- leukemia
1238	E	Macroscopic pituitary gland stomach, glandular	- enlarged, red, severe - swollen/thickened, mucosa, mild
1238	E	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - compression, ventral (pituitary tumor), moderate - within normal limits - within normal limits - within normal limits - within normal limits
E - Euthanized <i>in extremis</i>			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in RatsIndividual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1238	E	Microscopic eyes, optic nerves eyes, retina gall harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a	 - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - infiltration, mononuclear cell, minimal - vacuolation, periportal, minimal - within normal limits - within normal limits - within normal limits - degeneration, axonal/myelin, minimal - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1238	E	Microscopic nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum	- within normal limits - within normal limits - within normal limits - fibrosis, minimal - within normal limits - within normal limits - adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged) - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141

Dupont-18405-1238

H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE

Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1238	E	Microscopic small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder non-correlated macro observation Cause of Death	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - stomach, glandular - swollen/thickened - pituitary tumor
1239	E	Macroscopic kidneys	- dilatation, pelvic, bilateral, mild

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1239	E	Macroscopic lymph node, inguinal prostate gland skin, subcutis	- within normal limits draining node for mass a, right. - enlarged, moderate - mass, tan, mass a, right inguinal area, present approximately 2.0 cm in diameter. mass attached to lumbar spinal region. - irregular surface, limiting ridge, mild - distended with urine, moderate
1239	E	Microscopic stomach, nonglandular urinary bladder adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides	- hyperplasia, focal cortical, unilateral, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - inflammation, bilateral, moderate - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1239	E	Microscopic esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, focal, unilateral, minimal - cardiomyopathy, minimal - inflammation, subacute/chronic, mild - dilatation, tubular, bilateral, mild - hydronephrosis, bilateral, mild corresponds to macroscopic observation (kidneys - dilatation, pelvic) - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1239	E	Microscopic liver	- degeneration, cystic, focal, minimal - hyperplasia, bile duct, minimal - vacuolation, periportal, minimal
		lung	- hyperplasia, bronchiolar-alveolar, mild
		lymph node, inguinal	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- degeneration, axonal/myelin, mild
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		prostate gland	- inflammation, acute, moderate corresponds to macroscopic observation (prostate gland - enlarged)
		salivary gland, mandibular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1239	E	Microscopic salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin skin, subcutis small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus	- within normal limits - within normal limits - within normal limits - atrophy, mild - degeneration/necrosis, myofiber, mild - within normal limits - fibrosarcoma, malignant, primary, incidental, not cause of death corresponds to macroscopic observation (skin, subcutis - mass a) - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - erosion/ulcer, minimal - within normal limits - within normal limits - depletion, lymphoid, generalized, moderate

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1239	E	Microscopic thyroid gland	- adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death
		tongue	- hyperplasia, c-cell, focal, unilateral, mild
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- dilatation, bilateral, moderate
			- dilatation, moderate
			corresponds to macroscopic observation (urinary bladder - distended with urine)
			- hyperplasia, simple transitional cell, minimal
			- inflammation, moderate
		non-correlated macro observation	- stomach, nonglandular - irregular surface
		Cause of Death	- urogenital inflammation/obstruction/calculi
1240	S	Macroscopic testes	- enlarged, left, mild
1240	S	Microscopic liver	- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>1 mg/kg/day</u> 1240	S	Microscopic pancreas testes tongue	- atrophy, acinar, minimal - edema, unilateral, severe corresponds to macroscopic observation (testes - enlarged) - within normal limits
<u>50 mg/kg/day</u> 1251	S	Macroscopic pituitary gland	- enlarged, red, severe
1251	S	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur	- angiectasis/cystic degeneration, focal cortical, unilateral, minimal - hyperplasia, focal medullary, unilateral, minimal - within normal limits - within normal limits - within normal limits - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1251	S	Microscopic bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum	- within normal limits - compression, ventral (pituitary tumor), mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, mild - within normal limits - mineralization, pelvic, unilateral, minimal - mineralization, tubular, unilateral, minimal - nephropathy, chronic progressive, bilateral, moderate - within normal limits - within normal limits - within normal limits - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1251	S	Microscopic larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland	- within normal limits - degeneration, cystic, focal, minimal - hematopoiesis, extramedullary, minimal - hyperplasia, bile duct, minimal - histiocytosis, alveolar, minimal - erythrocytosis/erythrophagocytosis, sinus, minimal - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - fibrosis, minimal - hyperplasia, islet cell, mild - not examined - within normal limits - adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - enlarged) - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1251	S	Microscopic salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue	 - within normal limits - within normal limits - within normal limits - within normal limits - degeneration/necrosis, myofiber, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, severe - within normal limits - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1251	S	Microscopic trachea ureters urinary bladder	- within normal limits - within normal limits - within normal limits
1252	S	Macroscopic adrenal glands lymph node, mandibular pituitary gland	- enlarged, right, mild - discoloration, red, bilateral, mild - enlarged, red, mild
1252	S	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur	- pheochromocytoma, malignant, unilateral, primary, incidental, not cause of death corresponds to macroscopic observation (adrenal glands - enlarged) - within normal limits - within normal limits - within normal limits - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1252	S	Microscopic bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, mild - within normal limits - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1252	S	Microscopic liver	- degeneration, cystic, focal, mild - hematopoiesis, extramedullary, minimal - hyperplasia, bile duct, minimal
		lung	- crystals, hemoglobin, minimal
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal corresponds to macroscopic observation (lymph node, mandibular - discoloration, red)
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- exudate, nasal passage, minimal - inflammation, minimal
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- adenoma, islet cell, benign, primary, incidental, not cause of death - atrophy, acinar, minimal - hyperplasia, acinar cell, focal, mild
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1252	S	Microscopic parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		prostate gland	- inflammation, chronic-active, minimal
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1252	S	Microscopic spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder	- within normal limits - hematopoiesis, extramedullary, increased, minimal - within normal limits - within normal limits - hyperplasia, interstitial cell, unilateral, minimal - depletion, lymphoid, generalized, severe - adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death - within normal limits - within normal limits - within normal limits - within normal limits
1253	E	Macroscopic lymph node, iliac pituitary gland stomach, glandular stomach, nonglandular	- enlarged, bilateral, mild - enlarged, red, severe - focus/foci, tan, mucosa, mild - focus/foci, tan, mild

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1253	E	Microscopic adrenal glands	- hyperplasia, focal medullary, unilateral, minimal - hypertrophy, focal cortical, unilateral, minimal - vacuolation, focal, bilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- lipoma, benign, primary, incidental, not cause of death
		brain	- compression, ventral (pituitary tumor), moderate
		coagulating glands	- inflammation, bilateral, moderate
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, mild
		joint, tibiofemoral	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1253	E	Microscopic kidneys	- mineralization, pelvic, unilateral, minimal - nephropathy, chronic progressive, bilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- degeneration, cystic, focal, minimal - infiltration, mononuclear cell, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, iliac	- dilatation, sinus, mild corresponds to macroscopic observation (lymph node, iliac - enlarged) - hyperplasia, lymphocyte/plasmacyte, medulla, mild corresponds to macroscopic observation (lymph node, iliac - enlarged)
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1253	E	Microscopic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum	- within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, acinar cell, focal, mild - within normal limits - within normal limits - adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged) - inflammation, chronic-active, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1253	E	Microscopic small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hematopoiesis, extramedullary, increased, minimal - erosion/ulcer, mild corresponds to macroscopic observation (stomach, glandular - focus/foci, tan) - hyperplasia, epithelial, nonglandular, moderate corresponds to macroscopic observation (stomach, nonglandular - focus/foci, tan) - inflammation, mild - within normal limits - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1253	E	Microscopic urinary bladder Cause of Death	- within normal limits - pituitary tumor
1254	S	Macroscopic thyroid gland	- enlarged, tan, right, mild
1254	S	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
S - Scheduled necropsy E - Euthanized <i>in extremis</i>			

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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1254	S	Microscopic eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hematopoiesis, extramedullary, minimal - hyperplasia, bile duct, minimal - within normal limits - erythrocytosis/erythrophagocytosis, sinus, mild - within normal limits - degeneration, axonal/myelin, minimal
S - Scheduled necropsy			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1254	S	Microscopic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum	 - within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, acinar cell, focal, moderate - carcinoma, c-cell, malignant, unilateral, secondary - within normal limits - adenoma, pars distalis, benign, primary, incidental, not cause of death - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

S - Scheduled necropsy

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1254	S	Microscopic spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder	- within normal limits - within normal limits - degeneration, axonal/myelin, mild - hematopoiesis, extramedullary, increased, minimal - within normal limits - within normal limits - hyperplasia, interstitial cell, unilateral, minimal - depletion, lymphoid, generalized, severe - carcinoma, c-cell, malignant, unilateral, primary, incidental, not cause of death corresponds to macroscopic observation (thyroid gland - enlarged) - within normal limits - within normal limits - within normal limits - within normal limits
1255	D	Macroscopic kidneys	- enlarged, bilateral, mild

S - Scheduled necropsy
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats**Individual Animal Listing - MALE**
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1255	D	Macroscopic liver	- enlarged, multiple lobes, mild
1255	D	Microscopic adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, minimal - vacuolation, focal, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1255	D	Microscopic harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic	- within normal limits - cardiomyopathy, mild - within normal limits - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - focus of cellular alteration, basophilic, minimal - focus of cellular alteration, eosinophilic, minimal - hyperplasia, bile duct, minimal - infiltration, mononuclear cell, minimal - within normal limits - within normal limits - within normal limits - degeneration, axonal/myelin, minimal
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1255	D	Microscopic nose, level a	- exudate, nasal passage, minimal - fungus/yeast, mild - inflammation, minimal
		nose, level b	- exudate, nasal passage, moderate - fungus/yeast, moderate - inflammation, mild
		nose, level c	- exudate, nasal passage, mild - metaplasia, squamous, minimal
		nose, level d	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		prostate gland	- within normal limits
		salivary gland, mandibular	- fibrosis, mild
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
D - Died on Study			

Dupont-18405-1238

Individual Animal Listing - MALE

Terminal

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1255	D	Microscopic non-correlated macro observation	- kidneys - enlarged - liver - enlarged
		Cause of Death	- accidental injury
1256	D	Macroscopic eyes	- absent/cannibalized, left, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
		harderian glands	- absent/cannibalized, left, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
		lacrimal glands, exorbital	- absent/cannibalized, left, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
1256	D	Microscopic adrenal glands aorta	- within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in RatsIndividual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1256	D	Microscopic bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits one of pair present - within normal limits - within normal limits one of pair present - within normal limits - within normal limits one of pair present - cardiomyopathy, mild - within normal limits - nephropathy, chronic progressive, bilateral, mild
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1256	D	Microscopic lacrimal glands, exorbital	- within normal limits one of pair present
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal - hypertrophy, hepatocyte, centrilobular, minimal - infiltration, mononuclear cell, minimal - necrosis, focal, mild - vacuolation, centrilobular, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1256	D	Microscopic pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular	 - within normal limits - not examined - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1256	D	Microscopic stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - undetermined
1257	S	Macroscopic lymph node, axillary lymph node, mediastinal lymph node, mesenteric	- within normal limits draining node for mass a, right. - within normal limits draining node for mass c. - within normal limits draining node for mass b.

S - Scheduled necropsy
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1257	S	Macroscopic pancreas	- mass, tan, mass b, present approximately 2.0 cm in diameter.
		skin	- abrasion/scab, dorsal lumbar region, moderate corresponds to antemortem observation (scabbed area)
			- mass, tan, mass a, right lateral thorax, present corresponds to antemortem observation (nodule) approximately 0.5 cm in diameter.
		thymus	- mass, tan, mass c, present approximately 2.5 cm in diameter.
1257	S	Microscopic adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, minimal
		aorta	- hyperplasia, focal cortical, unilateral, mild
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1257	S	Microscopic brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx	- within normal limits - hyperplasia, unilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, focal, bilateral, minimal - cardiomyopathy, mild - within normal limits - hydronephrosis, bilateral, mild - nephropathy, chronic progressive, bilateral, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141

Dupont-18405-1238

H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE

Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1257	S	Microscopic liver	<ul style="list-style-type: none">- degeneration, cystic, focal, mild- hematopoiesis, extramedullary, minimal- hyperplasia, bile duct, minimal- hypertrophy, hepatocyte, centrilobular, minimal- infiltration, mononuclear cell, minimal- vacuolation, focal, minimal
		lung	<ul style="list-style-type: none">- within normal limits
		lymph node, axillary	<ul style="list-style-type: none">- within normal limits
		lymph node, mandibular	<ul style="list-style-type: none">- lymphoma, malignant, multicentric, incidental, not cause of death
		lymph node, mediastinal	<ul style="list-style-type: none">- lymphoma, malignant, multicentric, incidental, not cause of death
		lymph node, mesenteric	<ul style="list-style-type: none">- lymphoma, malignant, multicentric, incidental, not cause of death
		multicentric neoplasm	<ul style="list-style-type: none">- lymphoma, malignant, multicentric, incidental, not cause of death
		nerve, sciatic	<ul style="list-style-type: none">- degeneration, axonal/myelin, mild
		nose, level a	<ul style="list-style-type: none">- within normal limits
		nose, level b	<ul style="list-style-type: none">- within normal limits
		nose, level c	<ul style="list-style-type: none">- within normal limits
		nose, level d	<ul style="list-style-type: none">- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1257	S	Microscopic pancreas	- atrophy, acinar, minimal - carcinoma, islet cell, malignant, primary, incidental, not cause of death corresponds to macroscopic observation (pancreas - mass b)
		parathyroid glands	- hyperplasia, acinar cell, focal, minimal
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		prostate gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- degeneration/necrosis, myofiber, mild - adenoma, basal cell, benign, primary, mortality-independent corresponds to macroscopic observation (skin - abrasion/scab)
		small intestine, duodenum	- keratoacanthoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin - mass a) - within normal limits
S - Scheduled necropsy			

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Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1257	S	Microscopic small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - polyarteritis, bilateral, mild - depletion, lymphoid, generalized, moderate - lymphoma, malignant, multicentric, incidental, not cause of death corresponds to macroscopic observation (thymus - mass c) - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
S - Scheduled necropsy			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1258	D	Macroscopic liver lymph node, axillary skin, subcutis	- focus/foci, tan, left lateral lobe, mild - within normal limits draining node for mass a and mass b, right. - mass, scabbed, mass a, right axillary area, present approximately 2.5 cm in diameter, tan. - mass, tan, mass b, right axillary area, present approximately 1.5 cm in diameter.
1258	D	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus	- hyperplasia, focal cortical, unilateral, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1258	D	Microscopic eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung	- within normal limits - within normal limits - not examined autolysis too severe for diagnosis - within normal limits - hyperplasia, focal, unilateral, minimal - cardiomyopathy, mild - within normal limits - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - degeneration, cystic, focal, minimal - sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death corresponds to macroscopic observation (liver - focus/foci, tan) - sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death
D - Died on Study			

MPI Research Study Number 125-141
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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1258	D	Microscopic lymph node, axillary lymph node, mandibular lymph node, mesenteric multicentric neoplasm nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid	- sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death - within normal limits - within normal limits - sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - fibrosis, minimal - hyperplasia, focal, unilateral, mild - within normal limits - adenoma, pars distalis, benign, primary, incidental, not cause of death - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1258	D	Microscopic salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin skin, subcutis small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus	- within normal limits - within normal limits - within normal limits - within normal limits - sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b) - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hematopoiesis, extramedullary, increased, minimal - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, moderate
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1258	D	Microscopic thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - histiocytic sarcoma
1259	D	Macroscopic pituitary gland seminal vesicles stomach, nonglandular	- enlarged, red, severe - enlarged, bilateral, mild - focus/foci, tan, moderate
1259	D	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur	- angiectasis/cystic degeneration, focal cortical, unilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1259	D	Microscopic bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina gall harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx	- within normal limits - compression, ventral (pituitary tumor), moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - hydronephrosis, unilateral, mild - nephropathy, chronic progressive, bilateral, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1259	D	Microscopic liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular	- infiltration, mononuclear cell, minimal - histiocytosis, alveolar, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - atrophy, acinar, mild - fibrosis, minimal - within normal limits - within normal limits - adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged) - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1259	D	Microscopic salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular	- within normal limits - within normal limits - dilatation, bilateral, moderate corresponds to macroscopic observation (seminal vesicles - enlarged) - inflammation, bilateral, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1259	D	Microscopic stomach, nonglandular	- erosion/ulcer, severe corresponds to macroscopic observation (stomach, nonglandular - focus/foci, tan)
		testes	- hyperplasia, epithelial, nonglandular, moderate
		thymus	- inflammation, moderate
		thyroid gland	- within normal limits
		tongue	- depletion, lymphoid, generalized, severe
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- pituitary tumor
1260	D	Macroscopic pituitary gland	- enlarged, moderate
1260	D	Microscopic adrenal glands	- within normal limits
D - Died on Study			

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Individual Animal Listing - MALE

Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1260	D	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - compression, ventral (pituitary tumor), moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, focal, unilateral, mild - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats**Individual Animal Listing - MALE**
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1260	D	Microscopic large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx	 - within normal limits - within normal limits - within normal limits - degeneration, cystic, focal, mild - hyperplasia, bile duct, minimal - infiltration, mononuclear cell, minimal - vacuolation, focal, minimal - histiocytosis, alveolar, minimal - within normal limits - within normal limits - degeneration, axonal/myelin, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - not examined - within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1260	D	Microscopic pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, mild
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1260	D	Microscopic stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - adenoma, interstitial cell, benign, unilateral, primary, incidental, not cause of death - hyperplasia, interstitial cell, bilateral, minimal - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - accidental, died after bleeding
1261	S	Macroscopic all tissues	- within normal limits
1261	S	Microscopic adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, minimal
S - Scheduled necropsy D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1261	S	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, moderate - within normal limits - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits
S - Scheduled necropsy			

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Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1261	S	Microscopic large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands	- within normal limits - within normal limits - within normal limits - degeneration, cystic, focal, mild - focus of cellular alteration, eosinophilic, mild - hematopoiesis, extramedullary, minimal - infiltration, mononuclear cell, minimal - within normal limits - erythrocytosis/erythrophagocytosis, sinus, minimal - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - atrophy, acinar, minimal - hyperplasia, acinar cell, focal, minimal - hyperplasia, focal, unilateral, minimal one of pair present
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1261	S	Microscopic pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular	- within normal limits - adenoma, pars distalis, benign, primary, incidental, not cause of death - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
S - Scheduled necropsy			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1261	S	Microscopic testes thymus thyroid gland tongue trachea ureters urinary bladder	- within normal limits - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
1262	D	Macroscopic foot/feet liver lymph node, hepatic	- fracture, digit, left foreleg/limb, mild corresponds to antemortem observation (fracture) - mass, tan, mass a, right lateral lobe, present approximately 2.5 x 2.0 x 1.0 cm. - within normal limits draining node for mass a.
1262	D	urinary bladder Microscopic adrenal glands	- distended with urine, clear, moderate - within normal limits
S - Scheduled necropsy D - Died on Study			

MPI Research Study Number 125-141
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1262	D	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina foot/feet galt harderian glands heart	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - edema, moderate - necrosis, focal, moderate edema and necrosis likely infarct in origin. - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - fracture/callus, unilateral, no grade corresponds to macroscopic observation (foot/feet - fracture) - within normal limits - within normal limits - cardiomyopathy, minimal
D - Died on Study			

MPI Research Study Number 125-141
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1262	D	Microscopic joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, hepatic lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b	- within normal limits - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - carcinoma, hepatocellular, malignant, primary, incidental, not cause of death corresponds to macroscopic observation (liver - mass a) - degeneration, cystic, focal, minimal - infiltration, mononuclear cell, minimal - within normal limits - within normal limits - within normal limits - within normal limits - degeneration, axonal/myelin, minimal - exudate, nasal passage, minimal - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1262	D	Microscopic nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical	 - within normal limits - within normal limits - atrophy, acinar, minimal - hyperplasia, acinar cell, focal, mild - within normal limits - within normal limits - adenoma, pars distalis, benign, primary, incidental, not cause of death - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1262	D	Microscopic spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder non-correlated macro observation Cause of Death	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, moderate - adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death - within normal limits - within normal limits - within normal limits - within normal limits - urinary bladder - distended with urine - brain hemorrhage/necrosis
1263	E	Macroscopic adrenal glands	- enlarged, bilateral, mild

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1263	E	Macroscopic epididymides pituitary gland seminal vesicles testes	- small, bilateral, mild - enlarged, red, mild - small, bilateral, moderate - small, bilateral, moderate
1263	E	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate corresponds to macroscopic observation (adrenal glands - enlarged) - hyperplasia, focal medullary, unilateral, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, secretory, unilateral, moderate one of pair present

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1263	E	Microscopic epididymides	- oligospermia/germ cell debris, bilateral, severe corresponds to macroscopic observation (epididymides - small)
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- hyperplasia, focal, unilateral, minimal
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- nephropathy, chronic progressive, bilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
E - Euthanized <i>in extremis</i>			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1263	E	Microscopic liver	- degeneration, cystic, focal, minimal - focus of cellular alteration, basophilic, minimal - necrosis, focal, minimal - vacuolation, periportal, mild
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- depletion, lymphoid, generalized, moderate - dilatation, sinus, minimal - erythrocytosis/erythrophagocytosis, sinus, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1263	E	Microscopic pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		prostate gland	- inflammation, acute, moderate
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- depletion, secretory, bilateral, moderate corresponds to macroscopic observation (seminal vesicles - small)
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- depletion, lymphoid, generalized, moderate

E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1263	E	Microscopic stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - degeneration/atrophy, seminiferous tubules, bilateral, severe corresponds to macroscopic observation (testes - small) - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - pituitary tumor
1264	E	Macroscopic kidneys liver lymph node, axillary pituitary gland	- irregular surface, bilateral, mild - cyst, clear, single, median lobe, mild - within normal limits draining node for mass a, right. - enlarged, severe

E - Euthanized *in extremis*

MPI Research Study Number 125-141
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Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1264	E	Macroscopic skin	- mass, tan, mass a, right foreleg/limb, present corresponds to antemortem observation (nodule) approximately 1.0 cm in diameter.
1264	E	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - compression, ventral (pituitary tumor), mild - inflammation, unilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1264	E	Microscopic harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, axillary	- within normal limits - within normal limits - within normal limits - nephropathy, chronic progressive, bilateral, severe corresponds to macroscopic observation (kidneys - irregular surface) - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - angiectasis, minimal corresponds to macroscopic observation (liver - cyst) - degeneration, cystic, focal, minimal - hyperplasia, bile duct, minimal - infiltration, mononuclear cell, minimal - vacuolation, median cleft, minimal - within normal limits - within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1264	E	Microscopic lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles	- within normal limits - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged) - inflammation, acute, mild - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in RatsIndividual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1264	E	Microscopic skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder	- within normal limits - papilloma, squamous cell, benign, primary, mortality-independent corresponds to macroscopic observation (skin - mass a) - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1264	E	Microscopic Cause of Death	- pituitary tumor
1265	D	Macroscopic cavity, abdominal	- mass, tan, mass a, present approximately 10.0 x 11.0 x 2.0 cm. spleen, mesentery, multiple lobes of the liver were adhered to mass.
		liver	- focus/foci, tan, multiple lobes, moderate
		lymph node, mesenteric	- within normal limits
		pancreas	- draining node for mass a.
1265	D	Microscopic	- not identified, no grade
		adrenal glands	- within normal limits
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1265	D	Microscopic brain cavity, abdominal coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral	- within normal limits - sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death corresponds to macroscopic observation (cavity, abdominal - mass a) present on the serosal surface of numerous abdominal organs. - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - not examined autolysis too severe for diagnosis - within normal limits - within normal limits - cardiomyopathy, mild - within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1265	D	Microscopic kidneys	<ul style="list-style-type: none"> - hyaline, droplets, increased, bilateral, moderate - sarcoma, histiocytic, malignant, unilateral, multicentric, fatal, positive cause of death
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- mucus increased, mild
		liver	<ul style="list-style-type: none"> - necrosis, hepatocytes, centrilobular, severe - corresponds to macroscopic observation (liver - focus/foci, tan) - sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death - corresponds to macroscopic observation (liver - focus/foci, tan)
		lung	<ul style="list-style-type: none"> - sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death
		lymph node, mandibular	- within normal limits
		lymph node, mediastinal	<ul style="list-style-type: none"> - sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death slide 14.
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1265	D	Microscopic lymph node, mesenteric multicentric neoplasm nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid	- within normal limits - sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death a small amount of recognizable pancreas is present. - within normal limits one of pair present - within normal limits - adenoma, pars distalis, benign, primary, incidental, not cause of death - within normal limits - within normal limits - within normal limits
D - Died on Study			

Dupont-18405-1238

Individual Animal Listing - MALE

Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1265	D	Microscopic salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland	- within normal limits - sarcoma, histiocytic, malignant, bilateral, multicentric, fatal, positive cause of death - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death - sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death - within normal limits - depletion, lymphoid, generalized, severe - within normal limits

D - Died on Study

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1265	D	Microscopic tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - within normal limits - sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death - histiocytic sarcoma
1266	D	Macroscopic pituitary gland	- enlarged, red, moderate
1266	D	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain	- angiectasis/cystic degeneration, focal cortical, unilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - compression, ventral (pituitary tumor), moderate
D - Died on Study			

MPI Research Study Number 125-141
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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1266	D	Microscopic coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - mineralization, tubular, unilateral, minimal - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - exudate, luminal, mild - mucus increased, mild - degeneration, cystic, focal, minimal
D - Died on Study			

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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in RatsIndividual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1266	D	Microscopic lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual	 - histiocytosis, alveolar, minimal - within normal limits - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged) - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in RatsIndividual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1266	D	Microscopic seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - exudate, luminal, minimal - within normal limits - within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1266	D	Microscopic Cause of Death	- pituitary tumor
1267	D	Macroscopic adipose tissue	- discoloration, yellow, mild located in the inguinal region.
		foot/feet	- swollen/thickened, left hindleg/limb, right hindleg/limb, mild corresponds to antemortem observation (swelling)
		liver	- enlarged, multiple lobes, mild
		skin, subcutis	- nodule, tan, right axillary area, present corresponds to antemortem observation (nodule) approximately 0.3 x 0.2 x 0.1 cm.
1267	D	spleen	- focus/foci, tan, mild
		Microscopic adrenal glands	- vacuolation, focal, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1267	D	Microscopic bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, moderate - within normal limits - cyst, unilateral, minimal - nephropathy, chronic progressive, bilateral, moderate - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1267	D	Microscopic larynx liver lung lymph node, mandibular lymph node, mesenteric mesentery/peritoneum nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands	- within normal limits - degeneration, cystic, focal, mild - focus of cellular alteration, clear, minimal - hyperplasia, bile duct, mild - infiltration, mononuclear cell, minimal - histiocytosis, alveolar, minimal - within normal limits - within normal limits - necrosis, fat, mild corresponds to macroscopic observation (adipose tissue - discoloration, yellow) - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - adenoma, acinar cell, benign, primary, incidental, not cause of death - within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1267	D	Microscopic pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular	- within normal limits - adenoma, pars distalis, benign, primary, incidental, not cause of death - inflammation, subacute/chronic, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - papilloma, squamous cell, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - nodule) - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, reactive red pulp/stromal, mild corresponds to macroscopic observation (spleen - focus/foci, tan) - within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1267	D	Microscopic stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder non-correlated macro observation Cause of Death	- within normal limits - within normal limits - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - liver - enlarged - undetermined
1268	D	Macroscopic all tissues	- within normal limits
1268	D	Microscopic adrenal glands aorta bone marrow, femur	- within normal limits - within normal limits - within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1268	D	Microscopic bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - mineralization, tubular, unilateral, minimal - nephropathy, chronic progressive, bilateral, minimal - within normal limits - within normal limits - within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1268	D	Microscopic large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid	- within normal limits - within normal limits - within normal limits - histiocytosis, alveolar, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - fibrosis, minimal - within normal limits one of pair present - within normal limits - hyperplasia, craniopharyngeal, mild - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1268	D	Microscopic salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - degeneration/atrophy, seminiferous tubules, unilateral, minimal - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1268	D	Microscopic urinary bladder Cause of Death	- within normal limits - undetermined
1269	E	Macroscopic foot/feet pituitary gland stomach, nonglandular	- enlarged, left hindleg/limb, moderate corresponds to antemortem observation (swelling) - enlarged, red, moderate - focus/foci, tan, mild
1269	E	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum	- pheochromocytoma, benign, bilateral, primary, incidental, not cause of death - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
E - Euthanized <i>in extremis</i> D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1269	E	Microscopic brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina foot/feet galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx	- compression, ventral (pituitary tumor), moderate - hemorrhage, mild - within normal limits - oligospermia/germ cell debris, bilateral, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - osteoarthritis/pododermatitis, unilateral, moderate - within normal limits - within normal limits - cardiomyopathy, mild - within normal limits - nephropathy, chronic progressive, bilateral, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
E - Euthanized <i>in extremis</i>			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1269	E	Microscopic liver	- hyperplasia, bile duct, minimal - infiltration, mononuclear cell, minimal - vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- adenoma, islet cell, benign, primary, incidental, not cause of death - hyperplasia, islet cell, mild
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1269	E	Microscopic pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1269	E	Microscopic stomach, nonglandular	- erosion/ulcer, moderate corresponds to macroscopic observation (stomach, nonglandular - focus/foci, tan) - hyperplasia, epithelial, nonglandular, mild corresponds to macroscopic observation (stomach, nonglandular - focus/foci, tan) - inflammation, mild corresponds to macroscopic observation (stomach, nonglandular - focus/foci, tan) - degeneration/atrophy, seminiferous tubules, bilateral, severe - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - pituitary tumor
		testes	
		thymus	
		thyroid gland	
		tongue	
		trachea	
		ureters	
		urinary bladder	
		Cause of Death	

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1270	S	Macroscopic liver lymph node, axillary lymph node, hepatic skin, subcutis	- mass, tan, mass b, caudate lobe, present approximately 1.0 cm in diameter. - within normal limits draining node for mass a, right. - within normal limits draining node for mass b. - mass, tan, mass a, right axillary area, present corresponds to antemortem observation (mass 1) approximately 5.0 cm in diameter.
1270	S	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands	- vacuolation, focal, unilateral, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1270	S	Microscopic epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - hydronephrosis, unilateral, minimal - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1270	S	Microscopic liver	<ul style="list-style-type: none"> - adenoma, hepatocellular, benign, primary, incidental, not cause of death - corresponds to macroscopic observation (liver - mass b) - degeneration, cystic, focal, mild - focus of cellular alteration, eosinophilic, mild - hematopoiesis, extramedullary, minimal - hyperplasia, bile duct, minimal - inflammation, subacute/chronic, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, hepatic	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- degeneration, axonal/myelin, minimal
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- hyperplasia, acinar cell, focal, minimal
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1270	S	Microscopic parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin skin, subcutis small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical	- within normal limits one of pair present - within normal limits - adenoma, pars distalis, benign, primary, incidental, not cause of death - hyperplasia, craniopharyngeal, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - degeneration/necrosis, myofiber, minimal - within normal limits - fibroma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a) - within normal limits - within normal limits - within normal limits - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1270	S	Microscopic spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
1271	D	Macroscopic kidneys liver	- enlarged, bilateral, mild - enlarged, multiple lobes, moderate
1271	D	Microscopic adrenal glands	- pheochromocytoma, benign, bilateral, primary, incidental, not cause of death

S - Scheduled necropsy
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1271	D	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, focal, unilateral, minimal - cardiomyopathy, mild - within normal limits - hydronephrosis, bilateral, mild - nephropathy, chronic progressive, bilateral, moderate corresponds to macroscopic observation (kidneys - enlarged) - within normal limits
D - Died on Study			

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Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1271	D	Microscopic large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas	- within normal limits - within normal limits - within normal limits - within normal limits - cyst, biliary, simple, minimal - degeneration, cystic, focal, mild - focus of cellular alteration, basophilic, minimal - hyperplasia, bile duct, minimal - within normal limits - within normal limits - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - adenoma, islet cell, benign, multiple, primary, incidental, not cause of death - hyperplasia, acinar cell, focal, mild
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1271	D	Microscopic parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular	- within normal limits - within normal limits - adenoma, pars distalis, benign, primary, incidental, not cause of death - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1271	D	Microscopic stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder non-correlated macro observation Cause of Death	- within normal limits - within normal limits - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - liver - enlarged - accidental injury
1272	D	Macroscopic stomach, nonglandular	- focus/foci, tan, mild
1272	D	Microscopic adrenal glands aorta bone marrow, femur	- within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1272	D	Microscopic bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, moderate - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1272	D	Microscopic larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual	 - inflammation, minimal - necrosis, hepatocytes, centrilobular, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits one of pair present - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1272	D	Microscopic seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, epithelial, nonglandular, moderate corresponds to macroscopic observation (stomach, nonglandular - focus/foci, tan) - inflammation, minimal - within normal limits - depletion, lymphoid, generalized, severe - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1272	D	Microscopic trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - within normal limits - undetermined
1273	E	Macroscopic galt large intestine, cecum large intestine, colon small intestine, duodenum small intestine, ileum small intestine, jejunum stomach	- distended with gas, moderate - distended with gas, moderate - distended with gas, moderate - distended with gas, moderate - distended with gas, moderate - distended with gas, moderate - distended with gas, moderate
1273	E	Microscopic adrenal glands aorta bone marrow, femur	- vacuolation, focal, unilateral, minimal - within normal limits - within normal limits
E - Euthanized <i>in extremis</i> D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1273	E	Microscopic bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, minimal - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1273	E	Microscopic larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular	- within normal limits - degeneration, cystic, focal, minimal - vacuolation, median cleft, mild - granuloma, minimal - inflammation, acute, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - fibrosis, minimal - within normal limits - papilloma, squamous cell, benign, primary, fatal, positive cause of death - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141

Dupont-18405-1238

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Individual Animal Listing - MALE

Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1273	E	Microscopic salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1273	E	Microscopic ureters urinary bladder non-correlated macro observation	- within normal limits one of pair present - within normal limits - gall - distended with gas - large intestine, cecum - distended with gas - large intestine, colon - distended with gas - small intestine, duodenum - distended with gas - small intestine, ileum - distended with gas - small intestine, jejunum - distended with gas - stomach - distended with gas - larynx/pharynx tumor
1274	E	Cause of Death Macroscopic pituitary gland stomach, glandular	- enlarged, red, severe - swollen/thickened, mucosa, mild
1274	E	Microscopic adrenal glands	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1274	E	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - compression, ventral (pituitary tumor), moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - mineralization, tubular, unilateral, minimal - nephropathy, chronic progressive, bilateral, mild - within normal limits
E - Euthanized <i>in extremis</i>			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1274	E	Microscopic large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland	- within normal limits - within normal limits - within normal limits - within normal limits - necrosis, focal, mild - histiocytosis, alveolar, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged) - inflammation, chronic-active, mild

E - Euthanized *in extremis*

MPI Research Study Number 125-141

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Individual Animal Listing - MALE

Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1274	E	Microscopic salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, epithelial, nonglandular, mild - inflammation, minimal - within normal limits - not examined - within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1274	E	Microscopic tongue trachea ureters urinary bladder non-correlated macro observation Cause of Death	- within normal limits - within normal limits - within normal limits - within normal limits - stomach, glandular - swollen/thickened - pituitary tumor
1275	D	Macroscopic liver lymph node, hepatic pituitary gland	- mass, tan, mass a, median lobe, present approximately 0.5 cm in diameter. - not identified, no grade draining node for mass a. - cyst, red, severe
1275	D	Microscopic adrenal glands aorta bone marrow, femur	- within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1275	D	Microscopic bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon	- within normal limits - within normal limits - within normal limits - compression, ventral (pituitary tumor), moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - not examined autolysis too severe for diagnosis - within normal limits - hyperplasia, focal, unilateral, minimal - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1275	D	Microscopic large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas	- within normal limits - within normal limits - degeneration, cystic, focal, minimal - fibrosis, mild corresponds to macroscopic observation (liver - mass a) - hyperplasia, bile duct, minimal - hyperplasia, hepatocellular, regenerative, mild corresponds to macroscopic observation (liver - mass a) - vacuolation, median cleft, mild corresponds to macroscopic observation (liver - mass a) - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, acinar cell, focal, mild
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1275	D	Microscopic parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic	- within normal limits one of pair present - within normal limits - adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - cyst) - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1275	D	Microscopic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- hematopoiesis, extramedullary, increased, minimal - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - pituitary tumor
1276	E	Macroscopic pituitary gland stomach, nonglandular	- enlarged, red, severe - irregular surface, red, mild
1276	E	Microscopic adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, minimal - hyperplasia, focal cortical, unilateral, minimal

E - Euthanized *in extremis*
D - Died on Study

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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1276	E	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - compression, ventral (pituitary tumor), mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, moderate - within normal limits - mineralization, pelvic, unilateral, minimal - mineralization, tubular, unilateral, minimal - nephropathy, chronic progressive, bilateral, minimal
E - Euthanized <i>in extremis</i>			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1276	E	Microscopic lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric mammary gland nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - focus of cellular alteration, basophilic, mild - hyperplasia, bile duct, minimal - infiltration, mononuclear cell, minimal - vacuolation, periportal, minimal - within normal limits - within normal limits - within normal limits - dilatation, gland/lumen, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1276	E	Microscopic parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar	- within normal limits - within normal limits - adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged) - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - degeneration/necrosis, myofiber, minimal - degeneration/regeneration, myofiber, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141

Dupont-18405-1238

H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE

Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1276	E	Microscopic spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder	<ul style="list-style-type: none">- within normal limits- within normal limits- within normal limits- erosion/ulcer, moderate corresponds to macroscopic observation (stomach, nonglandular - irregular surface)- hyperplasia, epithelial, nonglandular, moderate corresponds to macroscopic observation (stomach, nonglandular - irregular surface)- inflammation, mild corresponds to macroscopic observation (stomach, nonglandular - irregular surface)- within normal limits- depletion, lymphoid, generalized, severe- hypertrophy/hyperplasia, follicular cell, bilateral, mild- within normal limits- within normal limits- within normal limits- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1276	E	Microscopic Cause of Death	- pituitary tumor
1277	S	Macroscopic testes	- discoloration, tan, right, moderate
1277	S	Microscopic adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal - hyperplasia, focal medullary, unilateral, minimal - vacuolation, focal, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		coagulating glands	- within normal limits
		epididymides	- within normal limits
S - Scheduled necropsy E - Euthanized <i>in extremis</i>			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1277	S	Microscopic esophagus eyes eyes, optic nerves eyes, retina gall harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - hydronephrosis, unilateral, mild - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1277	S	Microscopic liver	<ul style="list-style-type: none"> - degeneration, cystic, focal, mild - focus of cellular alteration, basophilic, mild - focus of cellular alteration, eosinophilic, mild - hematopoiesis, extramedullary, minimal - hyperplasia, bile duct, minimal - hypertrophy, hepatocyte, centrilobular, minimal
		lung	<ul style="list-style-type: none"> - granuloma, minimal - plant.
		lymph node, mandibular	<ul style="list-style-type: none"> - within normal limits
		lymph node, mesenteric	<ul style="list-style-type: none"> - within normal limits
		nerve, sciatic	<ul style="list-style-type: none"> - degeneration, axonal/myelin, minimal
		nose, level a	<ul style="list-style-type: none"> - adenocarcinoma, malignant, primary, incidental, not cause of death - extends to level b.
		nose, level b	<ul style="list-style-type: none"> - within normal limits
		nose, level c	<ul style="list-style-type: none"> - within normal limits
		nose, level d	<ul style="list-style-type: none"> - within normal limits
		pancreas	<ul style="list-style-type: none"> - fibrosis, minimal - hyperplasia, acinar cell, focal, minimal
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1277	S	Microscopic parathyroid glands	- adenoma, benign, unilateral, primary, incidental, not cause of death one of pair present
		pharynx	- within normal limits
		pituitary gland	- cyst, mild
			- hyperplasia, focal, pars distalis, mild
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1277	S	Microscopic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder	- within normal limits - within normal limits - within normal limits - adenoma, interstitial cell, benign, bilateral, primary, incidental, not cause of death corresponds to macroscopic observation (testes - discoloration, tan) both affected. - degeneration/atrophy, seminiferous tubules, unilateral, mild - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
1278	D	Macroscopic kidneys	- nodule, unilateral, present
S - Scheduled necropsy D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1278	D	Macroscopic lung with bronchi lymph node, mediastinal	- mass, tan, left lobe, mass a, present approximately 3.0 x 3.0 x 1.0 cm. - within normal limits draining node for mass a. - focus/foci, white, single, bilateral, mild
1278	D	zybal's gland Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves	- within normal limits - within normal limits - within normal limits - hyperplasia, granulocytic, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1278	D	Microscopic eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular	- within normal limits - within normal limits - within normal limits - cardiomyopathy, mild - within normal limits - carcinoma, sebaceous cell, malignant, unilateral, secondary corresponds to macroscopic observation (kidneys - nodule) - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - degeneration, cystic, focal, mild - infiltration, mononuclear cell, minimal - carcinoma, sebaceous cell (primary site unknown), malignant, primary, fatal, positive cause of death corresponds to macroscopic observation (lung with bronchi - mass a) - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1278	D	Microscopic lymph node, mediastinal lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris	- within normal limits - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, acinar cell, focal, mild - within normal limits one of pair present - within normal limits - adenoma, pars distalis, benign, primary, incidental, not cause of death - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1278	D	Microscopic skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder zymbal's gland non-correlated macro observation	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hematopoiesis, extramedullary, increased, minimal - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - zymbal's gland - focus/foci, white
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1278	D	Microscopic Cause of Death	- kidney tumor
1279	D	Macroscopic all tissues	- within normal limits
1279	D	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1279	D	Microscopic eyes, retina	- not examined autolysis too severe for diagnosis
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, mild
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, mild - nephropathy, chronic progressive, unilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- degeneration, cystic, focal, minimal - hyperplasia, bile duct, minimal - vacuolation, centrilobular, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1279	D	Microscopic nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - fibrosis, minimal - not examined - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1279	D	Microscopic spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - undetermined
1280	D	Macroscopic lymph node, mesenteric	- within normal limits draining node for mass a.
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1280	D	Macroscopic pancreas	- mass, tan, mass a, present approximately 4.0 x 3.0 x 3.5 cm.
1280	D	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands	- within normal limits - within normal limits - hyperplasia, granulocytic, mild - hyperplasia, granulocytic, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in RatsIndividual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1280	D	Microscopic heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d	 - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - degeneration, cystic, focal, mild - hyperplasia, bile duct, minimal - histiocytosis, alveolar, minimal - within normal limits - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1280	D	Microscopic pancreas	- carcinoma, acinar cell, malignant, primary, incidental, not cause of death corresponds to macroscopic observation (pancreas - mass a)
		parathyroid glands	- hyperplasia, acinar cell, focal, minimal
		pharynx	- not examined
		pituitary gland	- within normal limits
		prostate gland	- hyperplasia, focal, pars distalis, mild
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1280	D	Microscopic spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - hematopoiesis, extramedullary, increased, minimal - within normal limits - within normal limits - hyperplasia, interstitial cell, unilateral, minimal - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - accidental injury
1281	D	Macroscopic all tissues	- within normal limits
1281	D	Microscopic adrenal glands	- within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1281	D	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hemorrhage, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, minimal - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1281	D	Microscopic large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands	- within normal limits - within normal limits - erosion/ulcer, mild - inflammation, mild - hyperplasia, bile duct, minimal - necrosis, focal, minimal - bacterial colonies, minimal - necrosis, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits one of pair present
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1281	D	Microscopic pharynx	- hemorrhage, moderate - inflammation, moderate
		pituitary gland	- within normal limits
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1281	D	Microscopic testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - dosing injury
1282	E	Macroscopic lymph node, axillary pituitary gland skin, subcutis	- within normal limits draining node for mass a, right. - enlarged, mild - mass, tan, mass a, right axillary area, present corresponds to antemortem observation (mass 1) approximately 9.0 cm in diameter.
1282	E	Microscopic adrenal glands	- within normal limits
E - Euthanized <i>in extremis</i> D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1282	E	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits
E - Euthanized <i>in extremis</i>			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1282	E	Microscopic large intestine, colon large intestine, rectum larynx liver lung lymph node, axillary lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx	- within normal limits - within normal limits - within normal limits - hematopoiesis, extramedullary, minimal - vacuolation, periportal, minimal - histiocytosis, alveolar, minimal - within normal limits - erythrocytosis/erythrophagocytosis, sinus, minimal - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - exudate, nasal passage, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
E - Euthanized <i>in extremis</i>			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1282	E	Microscopic pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		skin, subcutis	- fibroma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1282	E	Microscopic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- hematopoiesis, extramedullary, increased, minimal - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, moderate - adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death - within normal limits - within normal limits - within normal limits - within normal limits - fibrosarcoma/fibroma
1283	S	Macroscopic lymph node, inguinal pituitary gland	- not identified, bilateral, no grade draining node for mass a, right, mass b, left. - enlarged, severe

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141

Dupont-18405-1238

H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE

Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1283	S	Macroscopic skin, subcutis	<ul style="list-style-type: none">- mass, tan, mass a, right inguinal area, present corresponds to antemortem observation (mass 1) approximately 4.0 x 5.0 x 2.0 cm.- mass, ulcerated, mass b, dorsal lumbar region, present corresponds to antemortem observation (nodule) approximately 1.5 cm in diameter, tan.
1283	S	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes	<ul style="list-style-type: none">- within normal limits- within normal limits- within normal limits- within normal limits- within normal limits- within normal limits- compression, ventral (pituitary tumor), mild- within normal limits- within normal limits- within normal limits- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1283	S	Microscopic eyes, optic nerves eyes, retina gall harderian glands heart joint, tibiofemoral kidneys lacrimial glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric	- within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - hydronephrosis, unilateral, minimal - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - degeneration, cystic, focal, minimal - hematopoiesis, extramedullary, minimal - hyperplasia, bile duct, minimal - histiocytosis, alveolar, minimal - within normal limits - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1283	S	Microscopic mammary gland	- fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- hyperplasia, acinar cell, focal, minimal
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
S - Scheduled necropsy			

Dupont-18405-1238

Individual Animal Listing - MALE

Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1283	S	Microscopic skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder	- degeneration/necrosis, myofiber, minimal - keratoacanthoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass b) - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141

Dupont-18405-1238

H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE

Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1284	E	Macroscopic foot/feet	- abrasion/scab, right hindleg/limb, moderate corresponds to antemortem observation (swelling)
1284	E	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - inflammation, bilateral, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1284	E	Microscopic heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d	- cardiomyopathy, minimal - within normal limits - hydronephrosis, unilateral, minimal - nephropathy, chronic progressive, bilateral, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - infiltration, mononuclear cell, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1284	E	Microscopic pancreas	- atrophy, acinar, minimal - fibrosis, minimal
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		prostate gland	- inflammation, subacute/chronic, severe
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- inflammation, bilateral, mild
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1284	E	Microscopic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- hematopoiesis, extramedullary, increased, minimal - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, simple transitional cell, mild - inflammation, mild - urogenital inflammation/obstruction/calculi
1285	E	Macroscopic pituitary gland seminal vesicles	- enlarged, red, severe - small, right, mild
1285	E	Microscopic adrenal glands	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1285	E	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - compression, ventral (pituitary tumor), moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, minimal - pyelitis, bilateral, minimal - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1285	E	Microscopic large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland	- within normal limits - within normal limits - within normal limits - within normal limits - infiltration, mononuclear cell, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - fibrosis, minimal - within normal limits - within normal limits - adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged) - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1285	E	Microscopic salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland	- within normal limits - within normal limits - within normal limits - dilatation, unilateral, mild corresponds to macroscopic observation (seminal vesicles - small) - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, severe - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1285	E	Microscopic tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - within normal limits - within normal limits - pituitary tumor
1286	S	Macroscopic foot/feet	- ulcer, plantar/palmar, mild corresponds to antemortem observation (swelling)
1286	S	pituitary gland Microscopic adrenal glands aorta bone marrow, femur	- enlarged, red, minimal - hyperplasia, focal cortical, unilateral, minimal - pheochromocytoma, benign, unilateral, primary, incidental, not cause of death - vacuolation, focal, unilateral, minimal - within normal limits - within normal limits

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1286	S	Microscopic bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, mild - within normal limits - hydronephrosis, unilateral, mild - nephropathy, chronic progressive, bilateral, moderate - within normal limits - within normal limits - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1286	S	Microscopic large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx	- within normal limits - within normal limits - degeneration, cystic, focal, minimal - focus of cellular alteration, basophilic, minimal - hematopoiesis, extramedullary, minimal - histiocytosis, alveolar, minimal - within normal limits - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - atrophy, acinar, minimal - fibrosis, minimal - within normal limits - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1286	S	Microscopic pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1286	S	Microscopic stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder	- within normal limits - within normal limits - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
1287	S	Macroscopic cavity, abdominal liver lymph node, mesenteric pituitary gland skin	- mass, red, mass a, present approximately 6.0 cm in diameter. near spleen, in fatty tissue. - focus/foci, red, multiple lobes, mild - within normal limits draining node for mass a. - enlarged, red, moderate - abrasion/scab, anogenital region, mild corresponds to antemortem observation (abrasion(s))

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats**Individual Animal Listing - MALE**
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1287	S	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys	 - angiectasis/cystic degeneration, focal cortical, unilateral, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - mineralization, focal, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, mild
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1287	S	Microscopic lacrimial glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - carcinoma, hepatocellular, malignant, primary, incidental, not cause of death corresponds to macroscopic observation (cavity, abdominal - mass a) - degeneration, cystic, focal, minimal - focus of cellular alteration, basophilic, minimal - focus of cellular alteration, eosinophilic, minimal - hematopoiesis, extramedullary, minimal - histiocytosis, alveolar, minimal - within normal limits - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1287	S	Microscopic nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland preputial glands prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris	- within normal limits - within normal limits - hyperplasia, acinar cell, focal, mild - hyperplasia, focal, unilateral, minimal one of pair present - within normal limits - adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - enlarged) - dilatation/inflammation, unilateral, mild corresponds to macroscopic observation (skin - abrasion/scab) - hyperplasia, squamous cell, unilateral, moderate - inflammation, chronic-active, mild - within normal limits - within normal limits - within normal limits - within normal limits - degeneration/necrosis, myofiber, minimal
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1287	S	Microscopic skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder non-correlated macro observation	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, severe - hyperplasia, c-cell, focal, unilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - liver - focus/foci, red

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1288	E	Macroscopic lymph node, mesenteric pituitary gland seminal vesicles skin, subcutis testes	- within normal limits draining node for mass a. - enlarged, red, severe - enlarged, bilateral, mild - mass, tan, mass a, abdominal, present corresponds to antemortem observation (mass 1) approximately 1.0 x 9.0 x 6.0 cm. - enlarged, red, right, mild - small, left, mild
1288	E	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain	- vacuolation, focal, unilateral, minimal - within normal limits - hyperplasia, mixed, mild - hyperplasia, mixed, mild - within normal limits - within normal limits - compression, ventral (pituitary tumor), mild

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1288	E	Microscopic cavity, abdominal coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx	- fibrosarcoma, malignant, secondary slide 11, pancreas. - within normal limits - oligospermia/germ cell debris, unilateral, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1288	E	Microscopic liver	- degeneration, cystic, focal, mild - hyperplasia, bile duct, minimal - infiltration, mononuclear cell, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		prostate gland	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1288	E	Microscopic salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin skin, subcutis small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - fibrosarcoma, malignant, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a) - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1288	E	Microscopic testes	- adenoma, interstitial cell, benign, unilateral, primary, incidental, not cause of death corresponds to macroscopic observation (testes - enlarged) - degeneration/atrophy, seminiferous tubules, unilateral, severe corresponds to macroscopic observation (testes - small) - depletion, lymphoid, generalized, severe
		thymus	- within normal limits
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		non-correlated macro observation	- seminal vesicles - enlarged
		Cause of Death	- fibrosarcoma/fibroma
1289	S	Macroscopic adrenal glands	- enlarged, left, moderate
		lymph node, inguinal	- not identified, right, no grade draining node for mass a.

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1289	S	Macroscopic skin	<ul style="list-style-type: none"> - mass, mass a, right lateral abdomen, present approximately 2.0 cm in diameter. - nodule, dorsal thoracic region, present corresponds to antemortem observation (nodule) approximately 0.4 cm in diameter.
1289	S	Microscopic adrenal glands	<ul style="list-style-type: none"> - pheochromocytoma, benign, unilateral, primary, incidental, not cause of death - pheochromocytoma, malignant, unilateral, primary, incidental, not cause of death corresponds to macroscopic observation (adrenal glands - enlarged)
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1289	S	Microscopic coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx	- within normal limits one of pair present - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, mild - within normal limits - cyst, unilateral, minimal - hydronephrosis, bilateral, minimal - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1289	S	Microscopic liver	- degeneration, cystic, focal, minimal - focus of cellular alteration, clear, minimal - hematopoiesis, extramedullary, minimal - hyperplasia, bile duct, minimal - hypertrophy, hepatocyte, centrilobular, minimal - histiocytosis, alveolar, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1289	S	Microscopic salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue	- within normal limits - within normal limits - within normal limits - within normal limits - keratoacanthoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin - nodule) - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hematopoiesis, extramedullary, increased, minimal - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, severe - hyperplasia, c-cell, focal, unilateral, minimal - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1289	S	Microscopic trachea ureters urinary bladder non-correlated macro observation	- within normal limits - within normal limits - within normal limits - skin - mass a
1290	E	Macroscopic pituitary gland	- enlarged, red, mild
1290	E	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - compression, ventral (pituitary tumor), moderate - depletion, secretory, bilateral, severe - within normal limits
S - Scheduled necropsy E - Euthanized <i>in extremis</i>			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1290	E	Microscopic esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - degeneration, cystic, focal, minimal - infiltration, mononuclear cell, minimal - histiocytosis, alveolar, minimal - erythrocytosis/erythrophagocytosis, sinus, minimal - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1290	E	Microscopic nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris	- degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - fibrosis, minimal - within normal limits one of pair present - within normal limits - adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged) - within normal limits - within normal limits - within normal limits - within normal limits - depletion, secretory, bilateral, severe - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1290	E	Microscopic skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, interstitial cell, bilateral, minimal - not examined - within normal limits - within normal limits - within normal limits - within normal limits one of pair present - within normal limits - pituitary tumor

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1291	D	Macroscopic foot/feet	- ulcer, plantar/palmar, mild corresponds to antemortem observation (ulcer plantar/palmar)
		kidneys	- enlarged, bilateral, mild
		liver	- enlarged, multiple lobes, mild
1291	D	Microscopic adrenal glands	- within normal limits
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1291	D	Microscopic eyes, retina	- not examined autolysis too severe for diagnosis
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- bacterial colonies, moderate - cardiomyopathy, severe - thrombus, moderate
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, tubular, bilateral, minimal - nephropathy, chronic progressive, bilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- degeneration, cystic, focal, minimal - necrosis, hepatocytes, centrilobular, severe corresponds to macroscopic observation (liver - enlarged)
		lung	- within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1291	D	Microscopic lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris	- within normal limits - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - fibrosis, minimal - hyperplasia, acinar cell, focal, mild - within normal limits - within normal limits - adenoma, pars distalis, benign, primary, incidental, not cause of death - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1291	D	Microscopic skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder non-correlated macro observation Cause of Death	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hematopoiesis, extramedullary, increased, minimal - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - kidneys - enlarged - heart failure/atrial thrombus
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in RatsIndividual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1292	D	Macroscopic all tissues	- within normal limits
1292	D	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1292	D	Microscopic joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c	- within normal limits - nephropathy, chronic progressive, bilateral, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - degeneration, cystic, focal, minimal - focus of cellular alteration, eosinophilic, minimal - hyperplasia, bile duct, minimal - necrosis, focal, minimal - vacuolation, periportal, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141

Dupont-18405-1238

H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE

Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1292	D	Microscopic nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1292	D	Microscopic stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - hyperplasia, interstitial cell, unilateral, minimal - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - undetermined
1293	D	Macroscopic testes	- enlarged, right, moderate
1293	D	Microscopic adrenal glands	- hyperplasia, focal medullary, bilateral, minimal - pheochromocytoma, benign, bilateral, primary, incidental, not cause of death
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1293	D	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - oligospermia/germ cell debris, bilateral, severe - within normal limits - within normal limits - necrosis, bilateral, mild accumulations of macrophages. - within normal limits - within normal limits - hyperplasia, focal, unilateral, mild - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, mild - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1293	D	Microscopic large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas	- within normal limits - within normal limits - within normal limits - within normal limits - degeneration, cystic, focal, minimal - focus of cellular alteration, basophilic, minimal - infiltration, mononuclear cell, minimal - necrosis, focal, mild - within normal limits - within normal limits - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - atrophy, acinar, minimal - fibrosis, minimal - hyperplasia, islet cell, minimal
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in RatsIndividual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1293	D	Microscopic parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular	 - within normal limits - within normal limits - adenoma, pars distalis, benign, primary, incidental, not cause of death - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hematopoiesis, extramedullary, increased, minimal - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1293	D	Microscopic stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - adenoma, interstitial cell, benign, unilateral, primary, incidental, not cause of death corresponds to macroscopic observation (testes - enlarged) - degeneration/atrophy, seminiferous tubules, unilateral, moderate - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - undetermined
1294	S	Macroscopic pituitary gland	- enlarged, moderate
1294	S	Microscopic adrenal glands	- pheochromocytoma, benign, bilateral, primary, incidental, not cause of death
S - Scheduled necropsy D - Died on Study			

MPI Research Study Number 125-141

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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE

Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1294	S	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cataract, unilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, mild - within normal limits - nephropathy, chronic progressive, bilateral, moderate - within normal limits - within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1294	S	Microscopic large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas	- within normal limits - within normal limits - within normal limits - degeneration, cystic, focal, mild - focus of cellular alteration, eosinophilic, minimal - hematopoiesis, extramedullary, minimal - hyperplasia, bile duct, minimal - hypertrophy, hepatocyte, centrilobular, minimal - histiocytosis, alveolar, minimal - within normal limits - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - adenoma, islet cell, benign, primary, incidental, not cause of death
S - Scheduled necropsy			

MPI Research Study Number 125-141
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1294	S	Microscopic parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1294	S	Microscopic spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder	- within normal limits - hematopoiesis, extramedullary, increased, minimal - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
1295	S	Macroscopic kidneys	- irregular surface, tan, bilateral, moderate
1295	S	Microscopic adrenal glands aorta	- within normal limits - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1295	S	Microscopic bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, mild - within normal limits - hydronephrosis, unilateral, minimal - nephropathy, chronic progressive, bilateral, severe corresponds to macroscopic observation (kidneys - irregular surface) - within normal limits
S - Scheduled necropsy			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1295	S	Microscopic large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx	- within normal limits - within normal limits - within normal limits - within normal limits - degeneration, cystic, focal, mild - hypertrophy, hepatocyte, centrilobular, minimal - histiocytosis, alveolar, minimal - within normal limits - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - adenoma, acinar cell, benign, primary, incidental, not cause of death - hyperplasia, acinar cell, focal, mild - not examined - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats**Individual Animal Listing - MALE**
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1295	S	Microscopic pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		testes	- hyperplasia, interstitial cell, unilateral, minimal

S - Scheduled necropsy

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1295	S	Microscopic thymus thyroid gland tongue trachea ureters urinary bladder	- depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
1296	E	Macroscopic lymph node, axillary skin, subcutis	- within normal limits draining node for mass a, left. - mass, scabbed, mass a, left axillary area, present corresponds to antemortem observation (mass 1) approximately 11.0 x 9.0 x 5.0 cm, tan.
1296	E	urinary bladder Microscopic adrenal glands aorta	- calculus/calculi, mild - within normal limits - within normal limits

S - Scheduled necropsy
E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1296	E	Microscopic bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - oligospermia/germ cell debris, bilateral, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - nephropathy, chronic progressive, bilateral, minimal - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1296	E	Microscopic large intestine, rectum larynx liver lung lymph node, axillary lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid	 - within normal limits - within normal limits - necrosis, focal, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - fibrosis, minimal - within normal limits - within normal limits - hyperplasia, focal, pars distalis, minimal - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1296	E	Microscopic salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin skin, subcutis small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue	- within normal limits - within normal limits - within normal limits - within normal limits - lipoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a) - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - degeneration/atrophy, seminiferous tubules, bilateral, minimal - depletion, lymphoid, generalized, severe - within normal limits - within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1296	E	Microscopic trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - within normal limits - lipoma/liposarcoma
1297	S	Macroscopic eyes pituitary gland testes urinary bladder	- cloudy, bilateral, mild corresponds to antemortem observation (cataract - mature eye discolored) - enlarged, mild - discoloration, tan, right, mild - swollen/thickened, mild contents white and foamy with fine sand present.
1297	S	Microscopic adrenal glands	- pheochromocytoma, benign, bilateral, primary, incidental, not cause of death - vacuolation, focal, unilateral, minimal
S - Scheduled necropsy E - Euthanized <i>in extremis</i>			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1297	S	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - inflammation, unilateral, mild - oligospermia/germ cell debris, unilateral, severe - within normal limits - cataract, bilateral, moderate corresponds to macroscopic observation (eyes - cloudy) - synechia, bilateral, severe - within normal limits - detachment, retinal, unilateral, moderate - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1297	S	Microscopic kidneys	<ul style="list-style-type: none"> - hydronephrosis, unilateral, mild - hyperplasia, transitional cell, bilateral, mild - nephropathy, chronic progressive, bilateral, mild - pyelitis, bilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	<ul style="list-style-type: none"> - degeneration, cystic, focal, minimal - focus of cellular alteration, basophilic, mild - focus of cellular alteration, clear, mild - focus of cellular alteration, eosinophilic, mild - hematopoiesis, extramedullary, minimal - hyperplasia, bile duct, minimal - infiltration, mononuclear cell, minimal
		lung	- within normal limits
		lymph node, mandibular	- dilatation, sinus, minimal
		lymph node, mesenteric	- within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1297	S	Microscopic nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris	- degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, focal, unilateral, mild one of pair present - within normal limits - adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - enlarged) - inflammation, chronic-active, mild - within normal limits - within normal limits - within normal limits - inflammation, bilateral, mild - degeneration/necrosis, myofiber, minimal
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1297	S	Microscopic skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - adenoma, interstitial cell, benign, unilateral, primary, incidental, not cause of death corresponds to macroscopic observation (testes - discoloration, tan) - hyperplasia, interstitial cell, unilateral, minimal - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1297	S	Microscopic ureters urinary bladder	<ul style="list-style-type: none"> - within normal limits - hyperplasia, papillary/nodular transitional cell, moderate corresponds to macroscopic observation (urinary bladder - swollen/thickened) - inflammation, moderate corresponds to macroscopic observation (urinary bladder - swollen/thickened)
1298	E	Macroscopic large intestine, cecum large intestine, colon small intestine, ileum	<ul style="list-style-type: none"> - distended with gas, mild - distended with gas, mild - distended with gas, mild
1298	E	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum	<ul style="list-style-type: none"> - within normal limits - within normal limits - hyperplasia, granulocytic, minimal - hyperplasia, granulocytic, minimal

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1298	E	Microscopic bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1298	E	Microscopic liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c	- within normal limits - histiocytosis, alveolar, minimal - inflammation, acute, minimal - dilatation, sinus, minimal - within normal limits - within normal limits - exudate, nasal passage, moderate - fungus/yeast, moderate - inflammation, mild - metaplasia, squamous, mild - exudate, nasal passage, moderate - fungus/yeast, severe - inflammation, moderate - metaplasia, squamous, moderate - exudate, nasal passage, mild - fungus/yeast, severe - inflammation, mild - metaplasia, squamous, moderate
E - Euthanized <i>in extremis</i>			

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Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1298	E	Microscopic nose, level d	- erosion/ulcer, mild - inflammation, minimal - metaplasia, squamous, mild
		pancreas	- hyperplasia, acinar cell, focal, moderate
		parathyroid glands	- within normal limits
		pharynx	- hyperplasia, squamous epithelium, mild - inflammation, minimal
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- dilatation, gland/lumen, mild corresponds to macroscopic observation (small intestine, ileum - distended with gas)
		small intestine, jejunum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1298	E	Microscopic spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder non-correlated macro observation Cause of Death	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - large intestine, cecum - distended with gas - large intestine, colon - distended with gas - nose/oral inflammation/ulceration
1299	E	Macroscopic pituitary gland	- enlarged, red, severe

E - Euthanized *in extremis*

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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1299	E	Macroscopic stomach, nonglandular	- focus/foci, tan, mild
1299	E	Microscopic adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, minimal - hyperplasia, focal medullary, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141

Dupont-18405-1238

H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE

Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1299	E	Microscopic harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d	 - within normal limits - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, bile duct, minimal - infiltration, mononuclear cell, minimal - histiocytosis, alveolar, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1299	E	Microscopic pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical	- fibrosis, minimal - within normal limits one of pair present - within normal limits - adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged) - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1299	E	Microscopic spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - within normal limits - within normal limits - erosion/ulcer, moderate corresponds to macroscopic observation (stomach, nonglandular - focus/foci, tan) - hyperplasia, epithelial, nonglandular, moderate - hyperplasia, interstitial cell, unilateral, minimal - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - pituitary tumor

E - Euthanized *in extremis*

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Individual Animal Listing - MALE

Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1300	E	Macroscopic all tissues	- within normal limits
1300	E	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1300	E	Microscopic joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas	- within normal limits - nephropathy, chronic progressive, bilateral, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - degeneration, cystic, focal, minimal - focus of cellular alteration, eosinophilic, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1300	E	Microscopic parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1300	E	Microscopic stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- hyperplasia, epithelial, nonglandular, moderate - inflammation, moderate - within normal limits - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - undetermined
1301	D	Macroscopic lymph node, mandibular skin, subcutis	- within normal limits draining node for mass a, left. - mass, tan, mass a, ventral neck, present corresponds to antemortem observation (mass 1) approximately 5.0 x 3.5 x 2.0 cm.
1301	D	Microscopic adrenal glands	- within normal limits

E - Euthanized *in extremis*
D - Died on Study

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1301	D	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, mild - within normal limits - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits
D - Died on Study			

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Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1301	D	Microscopic large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric mammary gland nerve, sciatic nose, level a nose, level b nose, level c nose, level d	- within normal limits - within normal limits - within normal limits - degeneration, cystic, focal, mild - focus of cellular alteration, basophilic, minimal - focus of cellular alteration, eosinophilic, minimal - hyperplasia, bile duct, minimal - infiltration, mononuclear cell, minimal - histiocytosis, alveolar, minimal - within normal limits - within normal limits - fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a) - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1301	D	Microscopic pancreas	- carcinoma, acinar cell, malignant, primary, incidental, not cause of death
		parathyroid glands	- hyperplasia, acinar cell, focal, mild - within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
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Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1301	D	Microscopic spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - hematopoiesis, extramedullary, increased, minimal - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - undetermined
1302	D	Macroscopic all tissues	- within normal limits
1302	D	Microscopic adrenal glands	- within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1302	D	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hemorrhage, pelvis, unilateral, mild - nephropathy, chronic progressive, bilateral, mild - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in RatsIndividual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1302	D	Microscopic large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland	 - within normal limits - within normal limits - within normal limits - within normal limits - necrosis, focal, minimal - hemorrhage, minimal - histiocytosis, alveolar, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits one of pair present - within normal limits - within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1302	D	Microscopic prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, interstitial cell, bilateral, minimal - depletion, lymphoid, generalized, moderate - within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1302	D	Microscopic tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - within normal limits - within normal limits - undetermined
1303	D	Macroscopic all tissues	- within normal limits
1303	D	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1303	D	Microscopic epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric	 - inflammation, peritoneal, bilateral, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, minimal - within normal limits - within normal limits - within normal limits - within normal limits - degeneration, cystic, focal, minimal - within normal limits - within normal limits - within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1303	D	Microscopic nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum	- degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - adenoma, islet cell, benign, primary, incidental, not cause of death - within normal limits - within normal limits - adenoma, pars distalis, benign, primary, incidental, not cause of death - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1303	D	Microscopic small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - inflammation, peritoneal, unilateral, minimal - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - undetermined
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1304	D	Macroscopic adrenal glands	- mass, tan, mass a, right, present approximately 4.0 cm in diameter.
			- small, left, moderate
		coagulating glands	- small, bilateral, mild
		liver	- enlarged, multiple lobes, mild
		lymph node, renal	- not identified, right, no grade draining node for mass a.
		seminal vesicles	- small, bilateral, mild
		testes	- small, bilateral, mild
1304	D	Microscopic adrenal glands	- atrophy, cortical, unilateral, severe corresponds to macroscopic observation (adrenal glands - small)
			- carcinoma, cortical, malignant, unilateral, primary, incidental, not cause of death
			corresponds to macroscopic observation (adrenal glands - mass a)
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1304	D	Microscopic bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys	- within normal limits - within normal limits - inflammation, embolic, mild - depletion, secretory, bilateral, moderate corresponds to macroscopic observation (coagulating glands - small) - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - endocarditis, valvular vegetative, severe - within normal limits - bacterial colonies, bilateral, minimal - inflammation, embolic, bilateral, mild - nephropathy, chronic progressive, bilateral, moderate
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1304	D	Microscopic lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx	- within normal limits - edema, moderate - within normal limits - within normal limits - within normal limits - congestion, severe corresponds to macroscopic observation (liver - enlarged) - necrosis, hepatocytes, centrilobular, severe - carcinoma, cortical, malignant, secondary - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1304	D	Microscopic pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes	- within normal limits - inflammation, chronic-active, moderate - within normal limits - within normal limits - not examined - depletion, secretory, bilateral, moderate corresponds to macroscopic observation (seminal vesicles - small) - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hematopoiesis, extramedullary, increased, moderate - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1304	D	Microscopic thymus thyroid gland tongue trachea ureters urinary bladder non-correlated macro observation Cause of Death	- depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - testes - small - heart inflammation/necrosis
1305	E	Macroscopic pituitary gland	- enlarged, moderate
1305	E	Microscopic adrenal glands aorta bone marrow, femur	- adenoma, cortical, benign, unilateral, primary, incidental, not cause of death - hyperplasia, focal cortical, unilateral, mild - within normal limits - within normal limits

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1305	E	Microscopic bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum	- within normal limits - within normal limits - within normal limits - compression, ventral (pituitary tumor), mild - hemorrhage, mild - depletion, secretory, bilateral, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - nephropathy, chronic progressive, bilateral, mild - pyelitis, unilateral, minimal - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1305	E	Microscopic large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx	- within normal limits - within normal limits - within normal limits - degeneration, cystic, focal, minimal - focus of cellular alteration, eosinophilic, minimal - infiltration, mononuclear cell, minimal - histiocytosis, alveolar, minimal - erythrocytosis/erythrophagocytosis, sinus, minimal - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - fibrosis, minimal - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1305	E	Microscopic pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		prostate gland	- inflammation, chronic-active, mild
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- depletion, secretory, bilateral, moderate
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1305	E	Microscopic stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - pituitary tumor
1306	D	Macroscopic lacrimal glands, exorbital lymph node, mandibular salivary gland, mandibular salivary gland, parotid salivary gland, sublingual tongue	- absent/cannibalized, bilateral, no grade - absent/cannibalized, bilateral, no grade - absent/cannibalized, unilateral, no grade - absent/cannibalized, right, no grade - absent/cannibalized, unilateral, no grade - absent/cannibalized, no grade
1306	D	Microscopic adrenal glands	- hyperplasia, focal cortical, unilateral, minimal
E - Euthanized <i>in extremis</i> D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1306	D	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - not examined autolysis too severe for diagnosis - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1306	D	Microscopic lacrimal glands, exorbital	- within normal limits one is present, one is cannibalized.
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- bacterial colonies, minimal large areas with lysis of red blood cells.
		lymph node, mandibular	- not examined cannibalized
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1306	D	Microscopic pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular	- not examined - within normal limits - within normal limits - not examined one cannibalized, one missing. - within normal limits - not examined one cannibalized, one missing. - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1306	D	Microscopic stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - depletion, lymphoid, generalized, moderate - within normal limits - not examined cannibalized - within normal limits - within normal limits - within normal limits - dosing injury
1307	D	Macroscopic lymph node, axillary skin, subcutis urinary bladder	- within normal limits draining node for mass a, right. - mass, tan, mass a, right axillary area, present corresponds to antemortem observation (nodule) approximately 1.0 cm in diameter. - distended with urine, red, moderate
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1307	D	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - degeneration/necrosis, cartilage, moderate - hydronephrosis, bilateral, minimal - nephropathy, chronic progressive, bilateral, mild
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1307	D	Microscopic lacrimial glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, axillary lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - degeneration, cystic, focal, minimal - focus of cellular alteration, basophilic, minimal - hyperplasia, bile duct, minimal - infiltration, mononuclear cell, minimal - within normal limits - within normal limits - erythrocytosis/erythrophagocytosis, sinus, minimal - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1307	D	Microscopic pancreas	- adenoma, islet cell, benign, primary, incidental, not cause of death - atrophy, acinar, minimal
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		skin, subcutis	- fibroma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1307	D	Microscopic spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - dilatation, moderate corresponds to macroscopic observation (urinary bladder - distended with urine) - hemorrhage, minimal - inflammation, minimal - urogenital inflammation/obstruction/calculi
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1308	E	Macroscopic lymph node, inguinal skin, subcutis	- not identified, right, no grade draining node for mass a. - mass, scabbed, mass a, right lateral thorax, present corresponds to antemortem observation (scabbed area mass 1) approximately 10.0 x 7.0 x 1.3 cm, tan. extends down right rear limb.
1308	E	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain	- hyperplasia, focal medullary, unilateral, mild - pheochromocytoma, benign, unilateral, primary, incidental, not cause of death - sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1308	E	Microscopic cavity, abdominal	- sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death
		cavity, thoracic	- sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		head	- sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death slide 23.
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1308	E	Microscopic kidneys	- hyaline, droplets, increased, bilateral, moderate - nephropathy, chronic progressive, bilateral, minimal - sarcoma, histiocytic, malignant, bilateral, multicentric, fatal, positive cause of death
		lacrimal glands, exorbital	- atrophy, unilateral, mild
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death
		larynx	- within normal limits
		liver	- degeneration, cystic, focal, mild - hyperplasia, bile duct, minimal
		lung	- sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		multicentric neoplasm	- sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death
		nerve, sciatic	- degeneration, axonal/myelin, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1308	E	Microscopic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris	- within normal limits - within normal limits - within normal limits - within normal limits - atrophy, acinar, mild - hyperplasia, acinar cell, focal, minimal - sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death - within normal limits one of pair present - within normal limits - within normal limits - inflammation, chronic-active, mild - within normal limits - within normal limits - within normal limits - within normal limits - sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1308	E	Microscopic skin skin, subcutis small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus	- within normal limits - sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death corresponds to macroscopic observation (skin, subcutis - mass a) in addition to the mass, there is tumor in other sections with subcutis, such as slide 8, 9, and 18. - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hematopoiesis, extramedullary, increased, minimal - sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death - within normal limits - within normal limits - depletion, lymphoid, generalized, severe

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1308	E	Microscopic thyroid gland	- hyperplasia, c-cell, focal, unilateral, minimal
			- sarcoma, histiocytic, malignant, unilateral, multicentric, fatal, positive cause of death
		tongue	- sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death
		Cause of Death	- histiocytic sarcoma
1309	S	Macroscopic all tissues	- within normal limits
1309	S	Microscopic adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, minimal
			- hyperplasia, focal medullary, unilateral, minimal
			- vacuolation, focal, unilateral, minimal

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1309	S	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, focal, unilateral, minimal - cardiomyopathy, minimal - within normal limits - hydronephrosis, bilateral, mild - hyperplasia, transitional cell, bilateral, minimal - nephropathy, chronic progressive, bilateral, mild
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1309	S	Microscopic lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - focus of cellular alteration, basophilic, minimal - focus of cellular alteration, eosinophilic, minimal - hematopoiesis, extramedullary, minimal - within normal limits - within normal limits - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - carcinoma, islet cell, malignant, primary, incidental, not cause of death
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1309	S	Microscopic parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen	- within normal limits one of pair present - within normal limits - adenoma, pars distalis, benign, primary, incidental, not cause of death - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hematopoiesis, extramedullary, increased, minimal
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1309	S	Microscopic stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder	- within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, severe - within normal limits - hyperplasia, squamous cell, minimal - inflammation, subacute/chronic, minimal - within normal limits - within normal limits - within normal limits
1310	E	Macroscopic animal/whole body eyes kidneys testes	- body fat depleted, moderate corresponds to antemortem observation (thin) - cloudy, bilateral, mild corresponds to antemortem observation (eye discolored) - dilatation, pelvic, bilateral, mild - focus/foci, tan, left, mild

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1310	E	Macroscopic ureters urinary bladder	- distended with urine, bilateral, moderate - distended with urine, red, severe
1310	E	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - inflammation, bilateral, moderate - within normal limits - within normal limits - cataract, bilateral, moderate corresponds to macroscopic observation (eyes - cloudy) - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1310	E	Microscopic harderian glands heart joint, tibiofemoral kidneys lacrima glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver	<ul style="list-style-type: none"> - within normal limits - cardiomyopathy, minimal - within normal limits - bacterial colonies, bilateral, mild - dilatation, tubular, bilateral, moderate - hydronephrosis, bilateral, mild - corresponds to macroscopic observation (kidneys - dilatation, pelvic) - inflammation, embolic, bilateral, moderate - mineralization, tubular, bilateral, minimal - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, bile duct, minimal - infiltration, mononuclear cell, minimal - vacuolation, periportal, minimal
E - Euthanized <i>in extremis</i>			

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1310	E	Microscopic lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin	- within normal limits - erythrocytosis/erythrophagocytosis, sinus, minimal - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - inflammation, chronic-active, moderate - within normal limits - within normal limits - within normal limits - depletion, secretory, bilateral, moderate - degeneration/necrosis, myofiber, minimal - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141

Dupont-18405-1238

H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE

Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1310	E	Microscopic small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea	<ul style="list-style-type: none">- within normal limits- within normal limits- within normal limits- within normal limits- within normal limits- within normal limits- hematopoiesis, extramedullary, increased, minimal- within normal limits- cyst, keratin, mild- adenoma, interstitial cell, benign, bilateral, primary, incidental, not cause of death corresponds to macroscopic observation (testes - focus/foci, tan)- hyperplasia, interstitial cell, bilateral, moderate- depletion, lymphoid, generalized, moderate- within normal limits- hyperplasia, squamous cell, moderate- inflammation, subacute/chronic, mild- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1310	E	Microscopic ureters	- dilatation, bilateral, mild corresponds to macroscopic observation (ureters - distended with urine)
		urinary bladder	- inflammation, unilateral, minimal - bacterial colonies, moderate - dilatation, moderate corresponds to macroscopic observation (urinary bladder - distended with urine) - hemorrhage, severe corresponds to macroscopic observation (urinary bladder - distended with urine) - hyperplasia, simple transitional cell, moderate - inflammation, moderate - urogenital inflammation/obstruction/calculi
1311	S	Cause of Death Macroscopic all tissues	- within normal limits
1311	S	Microscopic adrenal glands	- within normal limits

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1311	S	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, minimal - within normal limits - polyarteritis, minimal
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1311	S	Microscopic large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas	- within normal limits - within normal limits - within normal limits - fibrosis, minimal - focus of cellular alteration, eosinophilic, mild - hematopoiesis, extramedullary, minimal - hypertrophy, hepatocyte, centrilobular, minimal - necrosis, focal, minimal - within normal limits - within normal limits - dilatation, sinus, minimal - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - exudate, nasal passage, minimal - foreign material, minimal plant. - within normal limits - atrophy, acinar, minimal
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1311	S	Microscopic parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen	- within normal limits one of pair present - within normal limits - adenoma, pars distalis, benign, primary, incidental, not cause of death - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1311	S	Microscopic stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder	- within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
1312	D	Macroscopic tongue	- absent portion/cannibalized, no grade distal portion.
1312	D	Microscopic adrenal glands aorta	- within normal limits one medulla present - within normal limits
S - Scheduled necropsy D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1312	D	Microscopic bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - not examined autolysis too severe for diagnosis - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1312	D	Microscopic large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular	- within normal limits - within normal limits - within normal limits - within normal limits - bacterial colonies, mild extensive lysis of red blood cells indicative of dosing injury. - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1312	D	Microscopic salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits
D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1312	D	Microscopic ureters urinary bladder Cause of Death	- within normal limits - within normal limits - dosing injury
1313	E	Macroscopic foot/feet pituitary gland	- swollen/thickened, left, moderate corresponds to antemortem observation (swelling) - cyst, clear, mild
1313	E	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
E - Euthanized <i>in extremis</i> D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1313	E	Microscopic epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, focal, unilateral, minimal - cardiomyopathy, minimal - within normal limits - mineralization, pelvic, unilateral, minimal - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, bile duct, minimal - infiltration, mononuclear cell, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1313	E	Microscopic lung	- foreign material, minimal plant.
			- inflammation, acute, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- hyperplasia, focal, bilateral, minimal one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - cyst)
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in RatsIndividual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1313	E	Microscopic salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue	 - within normal limits - within normal limits - within normal limits - degeneration/necrosis, myofiber, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, severe - adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1313	E	Microscopic trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - within normal limits - osteoarthritis/pododermatitis
1314	E	Macroscopic lymph node, inguinal pituitary gland skin, subcutis	- not identified, left, no grade draining node for mass a. - enlarged, mild - mass, tan, mass a, dorsal thoracic region, left, present corresponds to antemortem observation (mass 1) approximately 13.0 x 9.0 x 8.0 cm and extends from the left dorsal thorax and down the left leg. - discoloration, tan, right, mild
1314	E	testes Microscopic adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, minimal - pheochromocytoma, benign, unilateral, primary, incidental, not cause of death

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MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1314	E	Microscopic aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, secretory, bilateral, moderate - oligospermia/germ cell debris, unilateral, severe - within normal limits - within normal limits - within normal limits - degeneration/atrophy, retina, unilateral, mild - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1314	E	Microscopic large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx	- within normal limits - within normal limits - within normal limits - degeneration, cystic, focal, minimal - focus of cellular alteration, basophilic, minimal - hyperplasia, bile duct, minimal - vacuolation, periportal, minimal - histiocytosis, alveolar, minimal - within normal limits - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - hyperplasia, focal, unilateral, mild - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1314	E	Microscopic pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		prostate gland	- inflammation, chronic-active, severe
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- depletion, secretory, bilateral, moderate
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		skin, subcutis	- fibroma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1314	E	Microscopic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- hematopoiesis, extramedullary, increased, mild - within normal limits - within normal limits - adenoma, interstitial cell, benign, unilateral, primary, incidental, not cause of death corresponds to macroscopic observation (testes - discoloration, tan) - hyperplasia, interstitial cell, unilateral, minimal - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - fibrosarcoma/fibroma
E - Euthanized <i>in extremis</i>			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in RatsIndividual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1315	S	Macroscopic all tissues	- within normal limits
1315	S	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1315	S	Microscopic joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d	- within normal limits - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - focus of cellular alteration, eosinophilic, minimal - hematopoiesis, extramedullary, minimal - hyperplasia, bile duct, minimal - within normal limits - within normal limits - within normal limits - degeneration, axonal/myelin, minimal - within normal limits - within normal limits - within normal limits - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1315	S	Microscopic pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic	- adenoma, islet cell, benign, primary, incidental, not cause of death - not examined - within normal limits - adenoma, pars distalis, benign, primary, incidental, not cause of death - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - degeneration/necrosis, myofiber, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
S - Scheduled necropsy			

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1315	S	Microscopic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder	- within normal limits - within normal limits - within normal limits - hyperplasia, interstitial cell, bilateral, minimal - depletion, lymphoid, generalized, severe - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
1316	D	Macroscopic liver lymph node, axillary skin, subcutis	- focus/foci, tan, left lateral lobe, mild - enlarged, right, mild draining node for mass a. - mass, ulcerated, mass a, right axillary area, present corresponds to antemortem observation (mass 1) approximately 11.0 x 9.0 x 4.0 cm, tan.
S - Scheduled necropsy D - Died on Study			

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1316	D	Microscopic adrenal glands	- hyperplasia, focal cortical, unilateral, minimal - necrosis, bilateral, severe
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
D - Died on Study			

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Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1316	D	Microscopic kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, axillary lymph node, mandibular lymph node, mesenteric mammary gland nerve, sciatic	- mineralization, tubular, bilateral, minimal - nephropathy, chronic progressive, unilateral, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - degeneration, cystic, focal, minimal - necrosis, hepatocytes, centrilobular, moderate corresponds to macroscopic observation (liver - focus/foci, tan) - within normal limits - hyperplasia, lymphoid, generalized, mild corresponds to macroscopic observation (lymph node, axillary - enlarged) - within normal limits - within normal limits - fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a) - within normal limits
D - Died on Study			

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Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1316	D	Microscopic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical	 - within normal limits - within normal limits - within normal limits - within normal limits - fibrosis, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
D - Died on Study			

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1316	D	Microscopic spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - mammary tumor
1317	E	Macroscopic harderian glands meninges	- enlarged, left, moderate corresponds to antemortem observation (eye protruding eye discolored) - swollen/thickened, severe adjacent to and compressing the left cerebral hemisphere.

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141

Dupont-18405-1238

H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE

Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1317	E	Microscopic adrenal glands aorta bone marrow, femur bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt	<ul style="list-style-type: none">- within normal limits- within normal limits- within normal limits- within normal limits- within normal limits- within normal limits- schwannoma, malignant, secondary, meninges corresponds to macroscopic observation (meninges - swollen/thickened)- within normal limits- within normal limits- within normal limits- inflammation, acute, unilateral, moderate- schwannoma, malignant, unilateral, primary, fatal, positive cause of death corresponds to macroscopic observation (harderian glands - enlarged)- within normal limits- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1317	E	Microscopic harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d	- within normal limits - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - degeneration, cystic, focal, minimal - hematopoiesis, extramedullary, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

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Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1317	E	Microscopic pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid salivary gland, sublingual seminal vesicles skeletal muscle, biceps femoris skin small intestine, duodenum small intestine, ileum small intestine, jejunum spinal cord, cervical spinal cord, lumbar spinal cord, thoracic spleen stomach, glandular	- within normal limits - within normal limits - within normal limits - schwannoma, malignant, secondary - inflammation, subacute/chronic, minimal - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u>			
1317	E	Microscopic stomach, nonglandular testes thymus thyroid gland tongue trachea ureters urinary bladder Cause of Death	- within normal limits - within normal limits - depletion, lymphoid, generalized, moderate - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - schwannoma
1318	E	Macroscopic skin	- abrasion/scab, right inguinal area, mild corresponds to antemortem observation (abrasion(s))
1318	E	Microscopic adrenal glands aorta bone marrow, femur	- within normal limits - within normal limits - within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1318	E	Microscopic bone marrow, sternum bone, femur bone, sternum brain coagulating glands epididymides esophagus eyes eyes, optic nerves eyes, retina galt harderian glands heart joint, tibiofemoral kidneys lacrimal glands, exorbital large intestine, cecum large intestine, colon large intestine, rectum	 - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits - cardiomyopathy, minimal - within normal limits - nephropathy, chronic progressive, bilateral, mild - within normal limits - within normal limits - within normal limits - within normal limits

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
<u>50 mg/kg/day</u> 1318	E	Microscopic larynx liver lung lymph node, mandibular lymph node, mesenteric nerve, sciatic nose, level a nose, level b nose, level c nose, level d pancreas parathyroid glands pharynx pituitary gland prostate gland salivary gland, mandibular salivary gland, parotid	- within normal limits - hyperplasia, bile duct, minimal - within normal limits - within normal limits - within normal limits - within normal limits - exudate, nasal passage, minimal - inflammation, minimal - within normal limits - within normal limits - within normal limits - atrophy, acinar, minimal - fibrosis, minimal - not examined - within normal limits - within normal limits - within normal limits - within normal limits - within normal limits
E - Euthanized <i>in extremis</i>			